O. J. T. JOHNSTON, M. D.,
Batesville
President, Arkansas Medical Society
1937-38

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PRESIDENT'S ADDRESS TO THE GENERAL SESSION ARKANSAS MEDICAL SOCIETY*

GEO. B. FLETCHER, M. D.
Hot Springs National Park

Relatively few of us are selected as President of this society; however, I wish it were so that each of you could, at one time or another, serve in this capacity. During the past year as President I have learned many things which I should not have known otherwise and, with it all, I have had a good time doing what I could for organized medicine.

Needless to say, I am grateful to you for having shown your confidence in me by electing me to the highest position in our organization and I have truly put into the "job" my every effort. It so happens that I was chosen to serve you in a year when the Legislature was in session and such years are always busier than the socalled "off years."

Traveling a total of more than three thousand miles during the year I have attended about twenty meetings of various kinds and have made an effort to cover the different sections of the state insofar as was possible; if I failed to appear in any district you may be certain that something definite interfered.

The report of the Legislative Committee, given this morning, will give you an idea of what we were faced with and how the situations were met, but it will not begin to tell you the vast amount of work required on the parts of the Committee headed by Val Parmley and Peter Deisch. For the first time I came to realize how precarious would our position have been without having on the job at all times men who were familiar with the inner workings of legislative matters.

Without an efficient secretary and functioning committees a Presidents' regime would probably amount to "just another year" and I wish to take this opportunity to tell you that our secretary, "Bill," as you perhaps know, has been on the job at all times (barring the calls of Uncle Sam). I wish that time would permit mentioning the many faithful committee members who have performed for us but I will pass this by reminding you of the many benefits received from the Post-Graduate meetings, the Refresher Courses in Obstetrics and others too numerous to mention.

It is pleasing to note the high type of programmes put on by the county, tri-county and district societies. No one who has attended these meetings can truthfully say that he has not learned something by attending.

By careful choice and proper distribution our Vice-Presidents can fill a useful role instead of being thought of as simply honorary officers. There is no reason why they should not attend all meetings in their district and especially if the President is unable to attend.

As he promised, Governor Bailey has stood back of organized medicine and has always been willing to give our opinion due consideration so I feel that we should, in some manner, let him know of our appreciation.

To consider the question of Compulsory Health Insurance would consume too much time but each of you has been mailed enough literature on the subject to be perfectly familiar with what is proposed if you will only take the time to read it. The best place to educate the public about such matters is in your consultation room and unless you do something about it no one else will.

The Arkansas Medical Society is to be congratulated for its action in the Medical Directory racket, a very poor business to engage in. If the other states and the American Medical Association will back us up it will die of malnutrition. There is no good reason why one who is classified in any specialty should not belong to his special society and be included in its directory. Then, too, we have the directory of

* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 12, 1937.

the American Medical Association which has a most complete listing of physicians.

Here let me express my profound respect for the "Family Doctor" who has to meet all problems and, frequently, without outside aid, making it necessary for him to depend upon his God-given senses and his good judgment.

Let me call your attention to one of the best pieces of legislation ever enacted in this state: I refer to Act 3, sections 11-12 and 13, known as the Criminal Court Reform Procedure, which provides that when a defendant charged with crime pleads not guilty by reason of insanity or the court has reason to believe that such a plea will be entered, it is mandatory upon the court to place said defendant in the State Hospital for Nervous Diseases for a period not to exceed thirty days for observation and diagnosis after which the Superintendent must submit a sworn report to the court. Already this procedure has proved its value.

For many years you and I have seen politics play too great a part in the management of the State Hospital for Nervous Diseases. After all our greatest interest is in the care of the insane and it is most unfortunate that this seems to be a secondary matter when there is a change of administration.

A Workmen's Compensation Act seems desirable but it also seems to be a problem between capital and labor and the only interest the Medical Society has in the matter is the proper regulation of fees for medical care.

In conclusion let me request that you give Dr. Johnston, the incoming President, the same cooperation you have given me during the past year.

UNCONTROLLED EXPECTORATION AS A SOURCE OF INFECTION IN TUBERCULOSIS*

S. J. WOLFERMANN, M. D.
Fort Smith

That human sputum is the chief source of tuberculosis infection in humans is admitted by all and should require no argument. It is further "unanimously agreed that the one great essential for the prevention of this disease is the proper control of all open cases, including segregation of all those who cannot be kept under proper control in their homes."[1] The first postulate we know to be a scientific fact, but the second is an ideal toward which after more than thirty years of organized effort we have made but small progress. Previous to 1900 a great part of tuberculosis work was centered about prevention. In the early years of organization of the National Association, prevention programs were paramount. Anti-spitting laws and ordinances were legislated, though unfortunately few were enforced, but they helped to make the public "spitting conscious."

But as time went on and more research was developed, the mode of infection became better, but not thoroughly understood, and the trend seemed to change and more emphasis was put upon raising the resistance of the individual for prevention, and upon early diagnosis, and better treatment for the existing cases.

The mode of infection and its course, though not entirely agreed upon even at this date, is closely linked with our subject. Time does not permit of any extensive discussion, but certain phases are pertinent.

There are two sources of infection: Man himself, primarily, and cattle, secondarily. Of the many hypotheses that have been advanced in the past, several are worthy of consideration.

1. Cornet's, the infecting material being dust containing dry, pulverized tuberculous sputum, the initial foci pulmonary, and the site usually indoors; method inhalation.

2. Flugge's, again human sputum, the material, droplets of moist spray emitted by the tuberculous patient during forced expiratory acts, the initial foci pulmonary, the site most often indoors with prolonged and intimate contact with the tuberculous, and the method inhalation.

3. Aufrecht's, human or animal tuberculosis, the material, sputum, or anything (food, articles or hands) that are contaminated by sputum, the initial foci in the throat or its appendages from where metastases may occur to the lungs or elsewhere; method ingestion. This hypothesis is broad and anything and everything that contains tubercle bacilli and passes human lips can set up an infection.

This emphasizes the role of raw sputum. Tuberculous sputum can cause infection whether

[1] David R. Lyman, The Control of the Careless Consumptive. Am. Rev. Tuberc., 1918, 2, 36-42.

* Read before the Southern Tuberculosis Conference and Southern Sanatorium Association, Hot Springs National Park, Arkansas, October 1, 1936.

it be introduced in the form of sprays or moist droplets, or as inhalable or ingested dust, or as raw sputum.

Because the laboratory does not find the bacilli in the sputum does not mean that they are not there. May I recall the many excellent studies by H. J. Corper[2] and particularly his work published in 1928 where he showed that sputum must contain about 100,000 bacilli per cubic centimeter before it is demonstrated by the average well-trained laboratory worker. Consequently the sputum of any case diagnosed tuberculosis, whether the laboratory has found the bacilli or not, is considered infectious in the prevention program.

Recent years have shown us that infection with tubercle bacilli is a childhood and infant problem. If implantation of a few bacilli only takes place, healing results with an increased immunity. If this is proven incorrect, then we must say the child becomes allergic. This may be repeated time and time again, but larger doses and often repeated doses in infants and children, most of whom are not immune, produces infection. Massive doses of bacilli with prolonged contact often produces disease even in the relatively immune.

Statistical study in infants and children show the greatest incidence is at the time the child is ambulant and most out of doors (6-15). Though the opinion is not unanimous, I personally feel that this is due to a great number of raw sputum infections. Fresh raw sputum containing tubercle bacilli is on the streets everywhere and on our floors in private homes and public buildings. At home children live and play on the floor. Outside "ground games," marbles, top spinning, hot scotch, jacks, etc., are their amusements. The hands even of the normal child are dirty most of the time and with the dirt of the street are contaminated with the sputum of many people. Practically all children put their fingers in their mouth and one cannot help but feel that under these conditions a considerable quantity of raw sputum finds its way into children's mouths.

At every age man may breathe in tuberculous dust or droplets. Inhalation, ingestion, contact with tuberculous patients and contact with tuberculous sputum, all play their part. These in turn are influenced by the number and virulence of the bacilli, the natural resistance and acquired immunity of the host, the place of first localization of the infectious material and its relation to the path of dissemination. All these factors determine whether or not actual tuberculous disease ensues, and if so, where. In every case of tuberculosis the condition is what it is, because some tubercle bacilli have come to rest at certain places and there survived and flourished.

The early period of life with its absence of specific cell defense offers fairly early entrance to the bacilli and is the great danger of infants and children. After the specific defense has been established as it has in most adults, small doses of bacilli may pass mucous membranes and be destroyed, only increasing the defense, not once, but time and time again. Each infection is an endless interplay of immunity and hypersensitiveness on one hand and infection on the other.

What can we do about it? It should be our duty to prevent all infection if we could, and this would soon eliminate tuberculosis for there would be no sputum to disseminate. This, of course, is impossible. We know at present that tubercle bacilli are omnipresent. We can go back to the old "do nots" of Osler, teaching our children "Do not put fingers in your mouth," "Do not wet fingers when turning leaves of books." Do not put pencils, money, pins, anything but clean food and drink in your mouth." "Do not swap apple cores, candy, chewing gum, whistles or bean blowers." "Do not cough or sneeze in a person's face." "Do not spit except into a receptacle, gauze or handkerchief, or paper properly prepared for the purpose and properly disposed of."

We can carry on our education of the known tuberculous, teaching them their danger to others and the proper care of their sputum. We can fight for more sanatoria where this education can be carried on, resulting in more arrests and less sputum cases. We can foster more case workers to detect contacts and get them examined. We can assist in childhood testing and examining, to get these children early so they will not grow up to be sputum cases. We can help make our profession tuberculosis conscious so that diagnosis can be made earlier and more arrests obtained.

We can still fight to make tuberculosis a reportable and when necessary a quarantinable disease. Segregation may at times be necessary. Public health departments need active police powers given them by the legislatures of

[2] H. J. Corper, "Certified Diagnosis of Tuberculosis, etc." Jr. A. M. A., Vol. 91, No. 6, Aug. 11, 1928, p. 371.

all states, which some have already done. This with proper appropriations and equipment would permit isolation and forcible segregation of the vicious and careless consumptive who is such a dangerous carrier. The constitutional rights of man no more interfere with compulsory segregation of the tuberculous than they do in smallpox or leprosy. These people should be committed by the health officer for a period of time as long as he thinks the public good demands. The expense involved will always be less than the later expense of caring for those the consumptive infects.

Every phase of tuberculous work, prevention, early diagnosis, competent therapy and education, all tend to reduce sputum cases and lessen future infection. The general trend of civilization also tends to help this cause. The demands for better living conditions, wider and cleaner streets, fewer tenements, more suburban homes, more parks and play grounds, shorter working hours, better plumbing, better general sanitation and many other phases in this age of education and progress better the environment of the individual and raise his general resistance and lessen his susceptibility to manifest tuberculosis.

Cooper Clinic Building,
100 South 13th Street.

OBITUARY

WALTER M. CHAVIS, aged 59 years, died at his home in Pine Bluff March 14th after an invalidism of several months from a cerebral hemorrhage. Born March 25th, 1877, at Hamburg, he was a graduate of the Gate City Medical College in 1903. He practiced medicine in Ashley county until 1921 when he moved to Pine Bluff. In Ashley county he was coroner from 1912 to 1914 and also served as sheriff from 1916 to 1920. For a number of years he was chairman of the Ashley county democratic central committee. In Pine Bluff he confined himself to the diseases of the eye, ear, nose and throat. He was a member of the Baptist Church in Pine Bluff, and of the Masonic bodies at Hamburg. He was married on July 1, 1903, to Miss Maude Fox, who, with two daughters and two sons, survive him.

CHARLES W. HORTON, aged 65 years, died at his home in Hiwassee April 28th after a long illness. Born in St. Genevieve county, Missouri, June 23, 1872, he came to Benton county in 1900 following his graduation from Barnes Medical College in Saint Louis. Surviving relatives are his wife, one son and one daughter.

JAMES DANIEL MOONEY, aged 67 years died April 30, 1937, at the home of his son, Walter Mooney, in Ozark. Dr. Mooney was born August 16, 1867, and had practiced in Franklin County for all his active professional life. He was engaged in practice at Coal Hill prior to his last illness. Surviving relatives are two daughters and five sons.

JEFFERSON D. SOUTHARD, aged 76 years, died at his home in Fort Smith May 9th of carcinoma following a long illness. Born April 24, 1861, in Franklin county, Arkansas, he graduated from the University of Louisville School of Medicine in 1886 and had continuously practiced medicine in Fort Smith for 48 years. He was a pioneer in the use of the roentgen-ray. For 20 years he was chief surgeon of the Arkansas Central railroad, served as president of the Fort Smith Board of Health for 18 years and was a member of the board of trustees of the Arkansas State Sanatorium for a like period, serving on the original building committee of that institution. One of the founders of the city's first hospital, he served continuously as a member of its staff and that of its successors until 1929. During the World War he was chairman of the medical advisory board for Sebastian, Crawford and Scott counties. Active in organized medicine, he was an honorary member of the Sebastian county and the Arkansas Medical Societies, serving the county society on two occasions as president, and for five terms as secretary. He was a fellow of the American College of Surgeons and of the American Medical Association and a member of the Radiological Society of North America, being at one time a member of the editorial staff of this society. His civic activities included membership in the Methodist church, the Masonic lodge, the Elks and the Kiwanis club. He was married to Miss Florence Corinne Sherlock November 12, 1890, who, with two daughters, a brother, a sister, and one son, Dr. J. S. Southard, of Fort Smith, survive him.

PRESIDENT'S PAGE

In the beginning I want to say that I am looking forward with pleasant anticipation to a year of having the honor of serving you as president. I am not unmindful of the great responsibility that goes with the office, nor of the pace set by my predecessors. I can carry on the work only with your loyal support and co-operation, both of which I earnestly solicit.

Continuing a subject much emphasized in the past administration, it would be wise to familiarize yourselves with the Social Security Act, so that you may be able to discuss it intelligently with your patients and others who may be interested. It is under this act that a national system of compulsory health insurance will in all probability be introduced during the year.

A thing that lies close to my heart which has been called "the basic foundation of organized medicine," are our county medical societies. Such a society is an organization of men banded together in order to better serve the public through advantages gained by exchange of experiences and knowledge of each others work.

As suggested in the Arkansas Medical Journal of March, 1937, members should attend their county society meetings for the opportunity afforded to hear instructive papers, take part in the general discussion and in an endeavor to better understand their colleagues, and to form deeper friendships. The traditional privileges of your honored profession are carefully maintained in the tenets of your society. I urge your support to your society.

May I call attention to the fact that our official publication desires to give publicity to proceedings of county societies as a means of inspiration and encouragement to other groups in the profession. The Journal invites reports to be made that would be representative of the affairs of organized medicine.

I want to take this first opportunity to express my appreciation to my friends in the medical profession for the courtesies shown me during my recent illness. For personal visits, messages and letters, and for the flowers sent me by the state Society when in recent session, I thank you. Any time that I can be of service to any of you, please feel free to call on me.

O. J. T. JOHNSTON, M. D.

THE JOURNAL
OF THE
ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under direction of the Council

W. R. BROOKSHER, M. D., Editor
610 First National Bank Bldg., Fort Smith, Arkansas

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

EXCLUSIVE PUBLICATION—Articles are accepted for publication on the condition that they are contributed solely to this Journal.

NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

EDITORIAL

OUR PRESIDENT

Oscar Joe Tanner Johnston, installed as President of the Arkansas Medical Society at the close of the 62nd annual session in Little Rock, April 14, 1937, was born in Eclectic, Alabama, in 1883 and came to Arkansas with his parents in 1885. Upon completion of his public school studies, he entered the University of Arkansas School of Medicine, attending for two years. He completed his medical education at the University of Nashville Medical Department in 1907. Postgraduate study has appealed to him and he has on several occasions studied at Tulane University, at the Mayo Clinic and in Chicago. During the World War he was commissioned a captain in the medical corps and served overseas with Base Hospital No. 97 for eight months. Dr. Johnston is primarily interested in surgery and is surgeon to the Johnston-Craig Hospital in Batesville. For many years he has served as physician to the Masonic Orphans' Home at Batesville and takes a particular pride in showing visitors over this institution. His civic interests are varied: Steward, First Methodist Church; past president, Kiwanis Club; member, American Legion, Chamber of Commerce, and Masonic bodies. In organized medicine he has been an untiring worker, being perhaps best known for his activities as Secretary of the Second Councilor District Medical Society, an organization of which he is most proud and to which he devotes special attention in arranging its semi-annual meetings. His interest in organized medicine is shared by his wife, who takes her field as a member of the Auxiliary seriously and is this year vice-president of the state auxiliary.

The early months of 1937 have been unkind to our president, influenza, pneumonia, empyema, have in turn laid seige to him and his hope of attending the annual session was almost denied by a corneal ulcer which appeared but a few days in advance of the session. Luckily, this subsided so that he was able to make his appearance in the closing hours of the meeting, receiving the gavel on installation and making his first address to the society at the scheduled time. Recovery has been rapid since the meeting and we may expect to hear of him in usual vigor and excellent spirits leading and directing in the affairs of the Society.

Dr. Johnston brings to the Arkansas Medical Society an enthusiasm for the affairs of organized medicine, an urge to be doing things, a record of successful organization experience, a happy personality, a wide acquaintance, all of which promise that the Society's 63rd year will be its greatest.

EDITORIAL COMMENT

The attention of The Journal has been directed to a form letter mailed by an Arkansas insurance company which offers the lucrative appointment of medical examiner provided the physician addressed purchases one thousand dollars of insurance and subscribes for five hundred dollars of stock in the company. For years we have been an earnest advocate of life insurance for the professional man. We certainly do not think a one thousand dollar policy a burden. With the echoes of the depression and the memories of certain stocks with which we packed our safe deposit vault not undimmed in our consciousness, we unhesitatingly offer a bit of investment advice—put this five hundred dollars in fishing tackle, golf clubs, a new car, a roof on the house, a gold-plated bath tub, air conditioning for the office, or in any wise or unwise expenditure which you may contemplate, but let someone else buy that insurance company stock. We thought the medical directory racket at ten dollars for your name in a little book quite a good scheme; five hundred dollars for appointment as an examiner

strikes us as a new all-time high! Either prosperity has returned, or there are some individuals outside the walls with delusions of grandeur. Five hundred dollars from a doctor of medicine for insurance company stock! The next time we are in Little Rock we are going to sell Broadway bridge to a syndicate of physicians who are the examiners for this company.

The Journal is heartily in accord with the thought of the following editorial, clipped from the house organ of Eli Lilly and Company. The attention of the members of this Society is called to this exposition of the relationship existing between an honest, ethical manufacturer and the physician. The attitude here expressed is in marked contrast to that of the "throw-away" medical magazines, deriving their support, in large part, from manufacturers of dubious merit. In common with other reputable medical publications, The Journal of the Arkansas Medical Society accepts only such advertising as bears the approval of the Council on Pharmacy and Chemistry of the American Medical Association. This policy has proven its worth, bringing to the attention of our readers only the claims of those manufacturers who are ready and willing to cooperate with the Council in the introduction and in the continued manufacture and sale of medicinal products. As a matter of sound business policy and for the best interests of the Arkansas Medical Society and its official Journal, we urge that you reciprocate with the ethical firms who have demonstrated a willingness to cooperate with us, not only by the purchase of advertising space, but who have through the years evidenced that the welfare of the medical profession is a prime consideration with them.

WASTE?

The thought must periodically occur to every physician that pharmaceutical companies employ diverse methods of approach to the medical profession. Leaving out of account such companies as might perhaps be thought to oppose the function and social service of the doctor by directing promotional efforts on their products toward the lay public, there is an illustrious group of pharmaceutical houses in this country, a number of which are so well established that their founding is beyond the personal memory of this generation of physicians. These pharmaceutical manufacturers are frequently referred to as the "ethical" houses. The message which these pharmaceutical manufacturers have for the medical profession is conveyed in many ways but rarely is "cried aloud from the housetops."

Advertising through the medium of the recognized medical journals is perhaps the most commendable approach now available. Not only are these journals as much concerned with maintaining the professional place of the physician as is the physician himself, but the financial support which is lent the journal by the advertising within its pages may be of considerable aid in combating that bete noire of all publication efforts—a disproportionately high overhead expense.

There are other ways and means. One of them is costly—so expensive as to preclude its general use by any but those companies which enjoy the confidence of the medical profession to an unusual degree. A personal representative from the pharmaceutical company may call upon the doctor. But why? To the physician, his office hours form the basis of his livelihood. They are the hours which represent dollars and cents value. The only logical reasons which he may be expected to accept for giving of his time are those which involve an unusual personal satisfaction or the expectancy of receiving something which may be useful and which is, therefore, potentially valuable. This is the method upon which Eli Lilly and Company has pinned a large part of its hopes of maintaining old friendships with the physicians of this country and of cultivating new friends.

Perhaps the commonest means of attempting to gain the attention of the doctor is the advertising circular. Direct mailing would today be the most abused method of advertising to the medical profession if the physician paid a disproportionate amount of attention to the flood of form letters or pamphlets which is directed at him in each day's mail.

To every pharmaceutical manufacturer comes he who advertiseth advertising. Rapidly he discourses upon "coverage," the "accuracy" of the mailing lists in his possession, the "waste" of one or another kind of advertising. To Eli Lilly and Company there is only one unforgivable "waste" in advertising and that is the waste of the doctor's time. Long years of experience have proved to us that if we have something worthwhile for the doctor, it is worthwhile from his standpoint and from ours to talk it over with him. The only exception is this Bulletin which is placed in your hands through the mails to insure uniformity of delivery. Many of the facts contained in it will come to your attention in the advertisements in the medical journals. Most important of all, a representative of this company has been instructed to call upon you at regular intervals. He will be glad to supply literature dealing with our products if you wish to have it. Questions which he cannot answer, he will be glad to convey to our Research Laboratories.

THE FRANKLIN COUNTY CORRESPONDENT

Ozark, Arkansas
May 14, 1937.

I don't think I have thanked you enough for my party. I am still all puffed up and will hardly notice common people at all. I guess I will gradually come down to earth. You were very good to arrange so splendid a party for a one-horse country doctor. I will appreciate any suggestions as to how I am going to live up to the reputation I was given that night. It was indeed a high honor to have so distinguished a man as Dr. H. Moulton come to the party and say such kind things about a humble and inconspicuous member of the profession. And one does not often get such praise from Dr. Earle Hunt. These two might be termed the synonym and the antonym. It was mighty fine of all you Fort Smith men to come as well as McNeil and Hodges from so far away as Rogers and it was a pleasure to see my old friend Dr. Dibrell there and all the bunch from near around.

I particularly appreciate the American Doctor's Oddessy with all those autographs. It is one of my treasures and I will much enjoy reading it. . . .

THOS. DOUGLASS.

PROCEEDINGS OF SOCIETIES

The First Councilor District Medical Society was addressed at its meeting in Blytheville May 4th by Lyle Motley, Memphis, "Treatment of Edema, Cardiac and Renal;" Val Parmley, Little Rock, "Fractures of the Pelvic Girdle"; Ellis Fischel, Saint Louis, "Treatment of Cancer," and Chester D. Allen, Memphis, "Urinary Infections." The address of welcome was given by T. F. Hudson, Luxora, and the response was made by Ira Ellis, Monette. Luncheon was served at noon. E. J. Stroud, Jonesboro, was elected secretary. The society will next meet in Jonesboro.

The Tri-County Clinical Society met April 29th at Arkadelphia for the following program: "The Treatment of High Blood Pressure," S. C. Fulmer, Little Rock; "Diseases of the Kidneys," M. J. Kilbury, Little Rock, and "Some Interesting Case Reports," C. K. Townsend, Arkadelphia. In addition, talks were made by Dr. J. J. Willingham, State Sanatorium, and Miss Erle Chambers, Arkansas Tuberculosis Association, Little Rock. The following officers were elected President, A. S. Buchanan, Prescott; Vice-presidents, Paul Hardage, D. D. S., Arkadelphia, J. B. Hesterly, Prescott, and Jim McKenzie, Hope; Secretary-treasurer, J. W. Branch, Hope.

O. G. Hirst, Councilor.

Physicians from Clarksville, Ozark, Alma, Van Buren, Rogers, Fort Smith, Coal Hill, Hartman and Mulberry tendered Thos. Douglass of Ozark a banquet in Ozark May 4th celebrating his election for the 43rd consecutive year as secretary of the Franklin County Medical Society. Dr. Douglass was the subject of talks by H. Moulton, Fort Smith, and Earle Hunt, Clarksville, and a book inscribed with the signatures of those in attendance was given him. Scientific motion pictures were presented.

The Sebastian County Medical Society was addressed May 11th by W. R. Brooksher, "Roentgen Therapy of Infections."

L. M. Henry, Secretary.

The second annual meeting of the Doctors Smith of Arkansas will be held at Saint Mary's Hospital, Russellville, Thursday, June 3rd, 1937, at 7:00 p. m. This is to be a dinner meeting.

C. C. Reed, Jr., Little Rock, recently addressed the Lonoke County Medical Society on "Amebiasis."

The new Robins Clinic building in Camden was opened Thursday, April 22nd, with a meeting of the Ouachita County Medical Society. The doctors were entertained with a banquet preceding the scientific program. The scientific program was as follows

"Cranio-cerebral Injuries," Dr. Val Parmley, Little Rock.

"Anomalies of the Urinary Tract," Dr. H. Fay H. Jones, Little Rock.

"The Doctor in Court," Hon. Elbert Godwin, Camden.

The Benton County Medical Society met May 13th in dinner session at Rogers, the scientific program being a paper on "Cancer" by H. B. Wentz, Elkins. W. A. Moore, Guy Hodges and Clyde McNeil gave reports of the state meeting.

GEO. M. LOVE, Secretary.

RESOLUTION OF RESPECT ON THE DEATH OF DR. JOE L. CLEMMER

WHEREAS, Once again Death hath called a fellow Physician from our midst, completing his work in ministering to the needs of the afflicted;

AND WHEREAS, He having been a true and faithful Fellow Physician among us, and having devoted a great part of his life to organized medicine;

THEREFORE, Be It Resolved by the Benton County Medical Society in session at Bentonville, Arkansas, April 8, 1937, in testimony of its loss, to tender to the family of the Deceased our sincere condolence in this deep affliction, and that a copy of this resolution be spread upon the minutes of the Benton County Medical Society and a copy be sent to the Family of the Deceased.

Respectfully submitted by,

C. L. McNEIL,
G. A. HUGHES,
GEO. M. LOVE,
Committee.

"I like to imagine that I will continue to have the privilege of choice as to who will administer to my physical needs."—Carl E. Bailey, Governor of Arkansas, in an address to the public session of the Arkansas Medical Society, Little Rock, April 12, 1937.

PERSONALS AND NEWS ITEMS

E. W. Pillstrom has been appointed health officer at Coal Hill.

E. H. Abington, Beebe, recently addressed the annual class banquet of the Junior Agricultural College.

C. M. Harwell has been elected president of the Osceola Rotary Club.

E. A. Callahan has been elected president of the Carlisle School board.

S. J. Wolfermann has been elected president of the Fort Smith Rotary Club.

John Samuels, Little Rock, recently addressed the Arkansas Eugenics Association at Little Rock.

Hoyt Allen has been elected sergeant-at-arms of the Little Rock Rotary Club.

S. G. Daniels, Marshall, has been appointed a trustee of the Clinton Vocation Educational School.

The following have been elected in their respective Rotary Clubs: Rufus Martin, Director, Warren; and Joe Reid, Vice-president, Arkadelphia.

E. Close, Jerusalem, has been elected chairman of the Conway County Welfare Board.

Virgil L. Payne, Pine Bluff, addressed the Mississippi State Medical Association, May 13th, on "The Modern Concept of Sinus Surgery Versus the Idea Once a Sinus Always a Sinus."

Walter G. Eberle, Fort Smith, has been appointed a member of the State Board of Nursing Examiners.

N. G. Partee of Stephens has moved to Camden to become associated with the Robins Clinic.

J. T. Tipton, Mountain Home, was recently honored with an informal party and program celebrating the completion of his 50th year in the practice of medicine.

The following have been appointed to The State Medical Board of the Arkansas Medical Society: Second District, L. T. Evans, Batesville; Third District, D. L. Owens, Harrison; Sixth District, E. A. Callahan, Carlisle, and Seventh District, D. E. White, El Dorado.

F. Walter Carruthers, Little Rock, was one of four orthopedists conducting a crippled childrens' clinic at Texarkana April 20th.

Thos. Wilson is erecting a 15-room clinic building at Wynne.

The following attended the American College of Physicians in session at Saint Louis in April: J. W. Compton, Little Rock; F. N. Gordon, Fayetteville; C. H. Lutterloh, Hot Springs National Park; L. D. Massey, Osceola; O. C. Melson, Little Rock; E. M. Smith, Hot Springs National Park; C. C. Stevens, Blytheville, and W. R. Brooksher, Fort Smith.

R. H. Johnson, Clarksville, has been appointed health officer for Johnson county.

President Johnston spent two weeks at the Mayo Clinic in postgraduate study during May.

F. A. Gray, Batesville, has recovered from an illness.

J. S. Wilson has purchased the Mack Wilson Hospital at Monticello.

Dr. and Mrs. W. A. Craig, Eudora, held a family reunion at their home April 18th.

F. C. Mullins has moved from Wickes to Grannis.

Joe F. Shuffield, Little Rock, has been selected as Chairman of the Arkansas Fracture Committee of the American College of Surgeons.

H. King Wade, Hot Springs National Park, was the winner of the Dewell Gann golf trophy at the annual session of the Society.

J. S. Miller, Parkin, has been appointed a member of the Cross County Welfare Board.

Berry Moore has been elected vice-president of the El Dorado Lions Club.

PROCEEDINGS

OF THE

SIXTY-SECOND ANNUAL SESSION

OF THE

ARKANSAS MEDICAL SOCIETY

MARION HOTEL, LITTLE ROCK

April 12, 13, 14, 1937

FIRST SESSION, HOUSE OF DELEGATES APRIL 12, 1937, 9:30 A. M.

The meeting was called to order by Geo. B. Fletcher, President. S. J. Wolferman, E. E. Barlow and W. G. Hodges were appointed Committee on Credentials.

A. S. Buchanan, Joe F. Shuffield and A. D. Cathey were appointed to the Reference Committee.

The following delegates or alternates answered roll call:

W. A. Moore, Benton; J. G. Gladden, Boone; Alvin Butt, Carroll; S. W. Douglas, Chicot; Ira W. Ellis, J. W. Elders, Craighead-Poinsett; S. D. Kirkland, Crawford, L. C. McVay, Crittenden; T. J. Stewart, Cross; E. E. Estes, Dallas; H. T. Smith, Desha; Thos. Douglass, Franklin; Euclid Smith, Garland; W. M. Majors, Greene; J. S. Hopkins, Howard-Pike; L. T. Evans, Independence; J. M. Lemons, Jefferson; Earle Hunt, Johnson; O. L. Williams, Lee; L. L. Hubener, Mississippi; E. D. McKnight, Monroe; A. S. Buchanan, Nevada; J. S. Rinehart, Ouachita; B. H. Hawkins, Polk; Robert Hood, Pope-Yell; J. C. Gilliam, Prairie; H. F. H. Jones, S. C. Fulmer, Paul Mahoney, Alan Cazort, Karl Rosenbaum, Pulaski; Dewell Gann, Sr., Saline; J. W. Amis, H. Moulton, Sebastian; J. C. Graves, Sevier; J. O. Rush, St. Francis; A. D. Cathey, L. L. Purifoy, Union; and S. J. Allbright, White.

By action of the House of Delegates the following members present were seated as delegates from their county societies:

S. A. Drennen, Arkansas; J. B. Futrell, Clay; G. L. Henderson, Faulkner; W. T. Wootton, Louie G. Martin, Garland; W. G. Hodges, Hot Spring; L. J. Kosminsky, Miller; J. R. Loftis, Randolph; L. D. Duncan, Scott; W. H. Mock, Washington, and J. H. West, Woodruff.

Other members of the House of Delegates were:

President Fletcher, Past-presidents E. E. Barlow, E. F. Ellis, L. J. Kosminsky, J. M. Lemons, F. O. Mahony, W. H. Mock, M. E. McCaskill, M. L. Norwood, D. A. Rhinehart and W. T. Wootton, and Councilors C. W. Dixon, M. C. Hawkins, Jr., S. B. Hinkle, D. L. Owens, J. M. Proctor, H. A. Stroud and S. J. Wolfermann and the Secretary.

By motion the minutes of the Sixty-first Annual Session as published in the June 1936 issue of The Journal of the Arkansas Medical Society were adopted as correct.

E. E. Barlow, Past-president, took the chair.

PRESIDENT'S ADDRESS TO THE HOUSE OF DELEGATES OF THE ARKANSAS MEDICAL SOCIETY

This is a business meeting; therefore I will confine my remarks to the business of the Society.

First, let me thank my committees for their excellent work during the past year. You will hear their reports later.

I have received some unfavorable reports from the directory ruling and let me say in the beginning that I have had my name in one of these directories for a number of years. One specialist in his criticism stated that he had received references from all over the country, but when I looked into the matter I found that he has a going organization in his specialty with a directory; and there is no reason why he should not continue to receive references if he is affiliated, as he should be, with his organization. I immediately withdrew my name from the directory when the Society voted that we should do so and I feel that we should all "play the game."

One member said to me about as follows: "I don't attend the county meetings because those who run the society are drumming all the time and the programs are no good, so I keep my membership only because of my malpractice insurance." Now, no one should criticize an organization to which he belongs, unless, after an effort to correct conditions which are not satisfactory to him, he finds that his efforts to correct discrepancies are to no avail; then the proper thing to do, in my opinion, would be to withdraw from the society. I have yet to attend a meeting of any medical society, regardless of the mediocrity of the program, that I did not learn something and it ill behooves any of us to feel that we are so far above the average that we cannot learn something from the other fellow.

I am going to ask this society to appoint a committee to follow up a plan which I shall propose shortly and I feel that Dr. Al Buchanan of Prescott is the logical man to head this committee because of his familiarity with the situation and the fact that fundamentally the idea is his own with some rather minor suggestions of mine.

For a number of years the State Board of Medical Examiners has changed secretaries every four to eight years and this has necessitated the moving of records from city to city and by the time one secretary has partially familiarized himself with the records he has had to send them on to another place. The records are known to be in bad shape, poorly filed and classified; making it difficult to give requested information to the numerous inquiries. In view of the fact that it is desirable to have the office of the Secretary of the State Board of Medical Examiners centrally and permanently located and that Little Rock is so located, it is my suggestion that the records be moved to an office in the State Capitol building and that a full time Executive Secretary be employed to familiarize himself with all laws and records as well as with the laws of other states as they apply to license to practice medicine. As membership on this Board is an honorary one, and sought after, it is my feeling that no member of this Board should receive compensation beyond his actual expenses in attending regular or called meetings. The income of the board is, in my opinion, sufficient to pay a full time secretary and all other expenses. During the five year period, November 10, 1931, to November 10, 1936, the income was $10,280, and we know that these figures were taken from a period in which the income of the Board was unusually low due to the depression. I am informed that this change can be made by the board without any additional legislation and the sooner it is done the better for all concerned.

Again Val Parmley, Peter Diesch and our Legislative Committee have worked valiantly for our protection all of which will come out in their report.

The Committee on Post-Graduate work has done a wonderful piece of work and those who missed the meetings have something to regret.

The refresher courses in Obstetrics placed modern methods and new ideas at the door of all without individual expense.

It would be a great task to mention names of all who have served us well during the past year, but I cannot pass without mention of our Secretary Bill who is always "in there" when needed.

The University of Arkansas School of Medicine, as you all know, has a modern well-equipped plant. There are many graduates from this school in this state and other states and it seems to be the concensus of opinion that there is a real need for this school in Arkansas. Unfortunately, however, there have been misunderstandings in the past and I wish to express the hope that in the future the medical profession of Arkansas will be more in accord with the medical school. It may be that the medical school may have to literally "sell itself" to the medical profession of Arkansas; if such be the case, then the solution of the problem lies with the medical school. Be that as it may, I hope that in future years we may continue to look upon the school with the same amount of pride as we have in the past.

There is much work to be done today so I feel that brevity on my part will give us the needed time to transact the business of the Society.

The committees of the Society then reported as follows:

REPORT OF COMMITTEE ON SCIENTIFIC WORK

R. B. ROBINS, Chairman

Your Committee on Scientific Work has endeavored to prepare a program that will be very instructive to you. We do not have every field of medicine represented but we have enough variety to have something which will please every doctor present. We have kept uppermost in our minds the interests of the general practitioner in medicine. We realize that probably over ninety per cent of our membership is composed of general practitioners and we have asked all of our guests to prepare their addresses so that they will be of interest to the man doing general medicine.

We have nine out-of-state guests on the program representing outstanding men in their various specialties. We have Dr. Charles Gordon Heyd of New York, a surgeon; Dr. Charles B. S. Evans of Hollywood, a gynecol ogist; Dr. B. R. Kirklin of Rochester, Minn., a roentgenologist; Dr. T. A. Watters of New Orleans, a psychiatrist; Dr. Roy R. Kracke of Atlanta, a pathologist; Dr. Harry W. Lyman of St. Louis, eye, ear, nose and throat specialist; Dr. Charles H. Eyermann of St. Louis, an allergist; Dr. Harry Wilkins of Oklahoma City, a neuro-surgeon, and Dr. Hoy Sanford of St. Louis, a urologist.

In addition to our out-of-state guests we have twelve Arkansas physicians appearing on the program.

We desire to thank all the physicians who are appearing on the program for their effort.

We hope that you enjoy the program and believe that you will.

Respectfully submitted,

R. B. ROBINS,
L. L. PURIFOY,
W. R. BROOKSHER.

REPORT OF THE COMMITTEE ON MEDICAL LEGISLATION

VAL PARMLEY, Chairman

Our legislative program during the last session consisted chiefly of defensive work of which there was an unusual amount this year. The medical profession sponsored the passage of two bills: namely, House Bill 485, known as the Uniform Narcotic Act, and House Bill 335, by Mr. Bryson, fixing the dates for holding examinations to practice medicine on the third Tuesday in June and December of each year. These two bills were of no great importance so far as the medical society is concerned, but were nevertheless desirable. They passed both Houses without opposition and both bills have been signed by the Governor and are now laws.

Altogether there were more than one hundred forty bills introduced in this legislative session, including the Appropriation Bills for various charitable institutions, Workmen's Compensation, and public health measures, which were of more than passing interest to the medical profession. Some of them were very highly controversial measures such as Senate Bill 11, by Smith, known as the Osteopathic Bill, the State General Hospital Bill, the Nurses Training School Bill, the Chiropractic Bill, and the Malpractice Suits Bill. None of the bills directed against the profession dealing with methods of practice and teaching or permitting the rights enjoyed by our group to be extended to others whom we feel are incompetent, were passed.

At this point we desire to heartily thank the officers and membership of this Society for the marvelous response to our call for immediate cooperation at the times it was so urgently needed when certain of these bills were about to be called up for consideration in third reading and final passage. The vote of 86 to 6 in our favor on the Osteopathic Bill reflects the power of cooperation in a most pronounced manner.

Your Committee has no recommendation to make with reference to further legislation or passage of additional laws. No doubt, howeevr, when certain of the social security measures will have become active certain changes in our laws governing the practice of medicine will become necessary in order that the existing laws may conform to regulations laid down in the social security acts. This will be a matter for the Committee to consider when necessity demands.

In conclusion we desire to thank our President for again giving us this opportunity to serve the Arkansas Medical Society during the past year in the capacity of the Committee on Medical Legislation.

Respectfully submitted,

VAL PARMLEY,
A. S. BUCHANAN,
O. L. WILLIAMSON,
M. L. NORWOOD,
EUCLID M. SMITH.

At the conclusion of the reading of the report of the Committee on Medical Legislation, Val Parmley was granted the privilege of the floor and expressed his appreciation for the opportunity of service to the Arkansas Medical Society which had been his through eight years of participation on the committee and regretted that he would be forced to decline to accept a continuing appointment on the committee.

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

W. B. GRAYSON, Chairman

The Committee on Health and Public Instruction desires to submit the following report:

We regret to report that this Committee has not functioned as well as it could have, however, we believe that some things have been accomplished which were recommended in our last report.

1. Local doctors in all sections of Arkansas have not only prepared and delivered papers on public health and medical subjects in general to county and district medical society meetings, but also to civic organizations and other lay meetings. This is a forward step in public health education.

2. The State Board of Health and the Arkansas Medical Society, in cooperation with the Children's Bureau of the U. S. Department of Labor, Washington, D. C., sponsored a refresher course in obstetrics at six different cities in Arkansas, during January and February of this year. These courses were in the form of lectures by Dr. Davis, a member of the staff of Dr. De Lee, of Chicago, and also by demonstrations, moving pictures and consultations. These courses were well attended and, the Committee believes, accomplished a forward step for better prenatal, natal and postnatal care. The Board of Health, through its Division of Maternal and Child Health, is attempting to educate pregnant women to the importance of placing themselves under the care of competent physicians. Since these refresher courses in obstetrics met with the approval of the physicians of the state, as evidenced by their attendance, it is the opinion of this Committee that a similar refresher course should be offered in pediatrics.

3. The Committee is glad to report that no epidemics of any proportions have broken out in the State since the last report. Several scattered cases of communicable diseases have been reported to the State Board of Health, and in some instances progressed to be rather serious, but never reached alarming proportions. Most of these reports were for influenza and pneumonia this past fall and winter. Measles, mumps, scarlet fever and whooping cough cases showed a slight decrease under last year. Several scattered cases of poliomyelitis were reported during the summer and early fall, but in no case was there an epidemic reported of this disease. Several scattered cases of menigococcus meningitis were reported from various sections of the state, but in only one instance did it assume an epidemic form, and that was at Jonesboro during the winter flood, where the disease broke out among the refugees. There were approximately twenty-seven cases diagnosed, with only five deaths, which is not a very high mortality rate, considering the nature of this disease and the conditions under which it had to be treated. The splendid cooperation of the physicians in Jonesboro and the surrounding involved area during this outbreak is recognized. Tuberculosis continues to show a decrease, and Arkansas ranks lowest in deaths from tuberculosis of ten southwestern states.

4. The Malaria Sanitation program continues to progress, in that more drainage has been done near communities, more houses have been screened and many

more pit privies installed. Sanitation in general has improved over the State, however, it is the opinion of this Committee that more attention should be given the sanitation of tourist camps and trailer camps.

5. The quality of milk and dairy products in general has been improved. There has been close cooperation between the State Veterinary Department and the State Health Department, and other interested agencies, in an attempt to control undulant fever. There are now twelve cities in Arkansas operating under the Standard Milk Ordinance of the U. S. Public Health Service.

6. The State Hygienic Laboratory is concentrating its work on problems of public health significance.

7. With the aid of Social Security funds from the U. S. Public Health Service and the Children's Bureau of the U. S. Department of Labor, the Arkansas State Board of Health will be able to develop its program in public health and preventive medicine on a more stable basis. The Committee calls attention to the fact that the State Board of Health has cooperated with Organized Medicine in Arkansas in the development of its program.

8. At the request of the Surgeon General of the U. S. Public Health Service, the President of the Arkansas Medical Society, Dr. George Fletcher, appointed a special committee of three, last December, to confer with the State Health Officer with reference to a statewide veneral disease control program. This committee, composed of Dr. Louie Martin, of Hot Springs National Park, Chairman; Dr. George Jackson, of Little Rock, and Dr. D. W. Goldstein, of Fort Smith; met with the State Health Officer in December, 1936. The report of this special committee is attached.

W. B. GRAYSON,
S. W. DOUGLAS,
F. O. MAHONY,
B. M. STEVENSON.

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

W. G. HODGES, Chairman

The Council of Medical Education and Hospitals of the American Medical Association was created at a time when medical colleges were, for the most part, proprietary in character, and it has always been the function of the Council to hold the level of medical education as high as is reasonable, to detect and report weaknesses that may occur and to stimulate changes that will remedy these conditions.

The Council has labored to establish higher standards of medical education and has also prevailed upon the states to adopt legislative and administrative measures to provide greater safeguard for the public and to keep medical practice at the high level it has established.

Recent re-surveys of medical schools by the Council of medical education and hospitals show that much has been accomplished during the past few years. Many institutions have made greater efforts in the improvement of organization and administration, in the personnel, and, also, in securing more adequate financial support.

Our own medical school has made considerable growth, and it is the desire of the Arkansas Medical Society to see that it keeps pace with other institutions insofar as it is possible; to see that standards are not lowered; to strive to bring to the public the realization of the fact that a medical education is expensive, and unless it receives adequate public and financial support, inferior medical service will be the result.

The 1936-37 session of the University of Arkansas Medical School opened in the new building, which is a fire proof, well-lighted five-story building. The school represents the latest ideas in construction, with new modern equipment throughout, which affords an opportunity for the students to do first class work in all the departments.

The undergraduate work is most satisfactory. The school is on the approved list of the Council of Medical Education and meets all requirements, with the exception of hospital beds.

There were 298 students last year, 195 from Arkansas, and 94 from other states; 48 graduated, 29 of these having college degrees, and 39 obtained interneship.

The Committee wishes to commend the work of the post-graduate committee. It is meeting the hearty approval of the medical society and we urge that all take advantage of the study coming to them through this work.

The society is ever ready to give its assistance in informing and educating the public upon certain medical subjects that concern the communities as a whole. Valuable information is given in addresses and radio talks, sponsored by the profession.

The society should lend its influence toward educating the public in problems that affect the profession as well as the laity. One of these is the subject of compulsory health insurance and a concerted effort should be brought to bear to protect the public from this system.

Should such a system be adopted, it will attract quite a different type of men from those drawn into the present system, men who have given American medicine the high place it holds today. Many entering the profession would be job seekers with fixed income, with a certain number of patients, and fixed hours of work. It would, in fact, train American medical officials, rather than American doctors.

The medical profession has a responsibility here that they must carry and direct. Education must be planned, to the end that we may maintain, what we have laboriously won, a death rate and a morbidity rate lower than that of any country where compulsory insurance is in force.

We bring these thoughts to the attention of the profession for we are deeply concerned with the quality of material care the community receives.

Outstanding facts revealed in the last census of hospitals are fewer hospitals, increased capacity and increased occupancy.

There are 48 hospitals in Arkansas registered, 17 related institutions, which give some medical and nursing care in an ethical manner, but not considered hospitals, making a total of 65 with 8,943 beds. There are three hospitals approved for interneship, eight with accredited schools for nursing, reporting 233 students enrolled.

Respectfully submitted,

W. G. HODGES,
JOE F. SHUFFIELD,
R. T. SMITH.

W. T. Wootton, reporting for the Committee on Public Relations, presented the request of the Arkansas Tuberculosis Association that the Arkansas Medical Society sponsor the Christmas Tuberculosis Seal Sale in Arkansas in 1937. The Seal Sale this year is to honor the press for its active support of the campaign in past years. This matter was referred to the Reference Committee.

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

A. C. SHIPP, Chairman

Your Committee on Medical Economics has continued the study of this subject with observation of various plans now in operation to care for the indigent and low salaried group. We wish to report that what we envisaged a year ago as a beginning menace to the best medical practice has grown with surprising rapidity and vigor.

"This menace arises from the attempt of economists to place medical service in its relationship to the patient in the same category as material goods. This is fundamentally wrong. The reasoning establishing this conclusion cannot be incorporated in this report as it involves a review of the whole system of economics as evolved to date. This system based on the production, distribution and relation of material goods to people has contributed much to the advancement of human welfare but when it attempts to apply the same laws to human service, in which category medical practice falls, it is almost as inadequate to an understanding and treatment of the economic problems of today as the medical science of seventy-five years ago is to present day diagnosis and treatment of disease."

Our last report put forth a study of the basic principles of Medical Economics and we as a committee will admit without argument that it covered the field in a brief way fairly well. The development during the past year resulting in the formation of medical cooperatives organized and subsidized by governmental agencies has fulfilled our prophecy and our own failure to counteract this in any substantial way, by offering and putting into execution plans that will give better services, convict us of the crime of "sitting supinely by, like lotus-eaters, while our heritage is being taken away from us." As evidence of this we had then one or two such cooperatives beginning the experiment of socialized medicine. Today, one year later, we have prepayment schemes for medical care of rural dwellers under the sponsorship of the RRA launched in Arizona, Iowa, Mississippi, Missouri, North Dakota, Oklahoma, Tennessee, Utah, and West Virginia, ten states. Six of these organizations are in Arkansas.

In spite of this significant progress of an undesirable and inefficient type of medical services, we are met with the argument that we should move very cautiously while other sections of the country work out satisfactory plans of meeting this situation, particularly the National Association Headquarters, this in spite of the fact that we have been advised by the National Council that each local Association must work out, according to principles laid down there, a method adapted to the local problems. While we have felt that in time a system would be devised that would be satisfactory, through the results of experiments in the larger cities and medical centers, we have lost sight of the fact that their problem is so far different from ours that the practical application would not apply here. With this fact in mind your Committee feels that we should, as rapidly as possible, attack the problem of supplying medical services to the above mentioned groups in a way that affords them the best medical services under conditions which they can meet.

In the onward program of methods of dealing with socialized medicine it is inevitable that changes in the application of services to these needs will arise—yet, have already arisen—and must be met in harmony with the contemporary social methods. In view of this fact and also recognizing that no one group of society can successfully block the evolutionary mass advance, we recommend that through our Medical Society Economics Committee we form more intimate contact with Social Service groups and governmental agencies in our own state and counties in order to guide the medical phase of social advance along lines that will be of most practical and efficient value to both the people and the profession.

After a study of various methods now in operation, it is our belief that the so-called Washington plan, modified to meet local conditions, will meet the needs of most counties where there is a good working County Medical Society as well as those counties in which there are large cities. This plan has all the advantages of being ethical, flexible, and at the same time organized so as to provide the highest qualities of scientific medical services at the lowest possible cost to the patient. It is flexible enough to protect this service and the interests of the patient and the medical profession even though future studies should show that subsidization from the government is necessary to carry part of the burden and your Committee is convinced that that time is now at hand; if we do not provide a system that will do this we can say, without fear of refutation, an inferior method will be handed out to us, in fact it is already being done as evidenced by this statement: We quote from the February 1937 issue of The American Cotton Grower under caption of "Cooperative Medical Care," appearing under the name of Dr. R. C. Williams, RRA medical director. Outlining the work of medical cooperatives he says, "The general plan is to have a group of families band together and draw up a contract with some doctor, or several doctors. The families agree to pay so much each year; and the doctors, in return for this fee, agree to minister to their needs. The Resettlement Administration has taken an active part in sponsoring these cooperatives . . . . has financially aided in the setting up of several, and is ready to sponsor more. One example is in a county in Arkansas. There are 150 farm families receiving loans from the Resettlement Administration. An agreement is made with a doctor to look after these families for $30.00 per family per year. The families average about five members apiece. Immunization from smallpox, diphtheria, and typhoid is given when necessary, and all sickness is taken care of that does not require the use of a hospital. There is an extra charge, agreed upon in advance, when hospitalization is necessary. A reasonable limit is placed on the amount of medicine to be allowed to each family . . . . " We have used this example because it is a county in our own state. Such cooperatives are functioning in Ashley, Chicot, Jefferson, Mississippi and Phillips counties with all probability of their number

doubling within the next year. Following we note a few exerpts from the by-laws of one of these County Medical and Health Associations:

"Any person or family residing in Daviess County or vicinity may become a member of the association upon signing the membership agreement and payment of the regular annual membership fees.

"The annual dues, to be paid in advance at regular intervals during the year, in not more than four quarterly instalments, shall be as follows:

"(1) For a family of four or less.....$12.00 a year
"(2) for a family of seven or less.....$18.00 a year
"(3) For a family of eight or more.....$24.00 a year

"Directors shall be elected annually for a two-year period from the membership of the association.

"Membership in the association shall entitle the member and all persons in his immediate family to the following medical services without additional cost:

"(1) An annual physical examination.

"(2) Such medical care in the member's home and at the office of the physician as is usually given by a general practitioner in handling usual ailments.

"(3) Preventive services for the more common and prevalent diseases (typhoid fever, smallpox, scarlet fever, diphtheria, and other diseases whose frequency of occurrence in a community indicates desirability of preventive service).

"(4) Annual cleaning of teeth and examination.

"(5) Extractions and simple fillings of teeth on specific recommendations of the attending dentist, as disclosed by examination.

"(6) Preventive service and instructions on oral hygiene.

"(7) Annual examination of eyes."

There needs no comment on the kind of medical services that can be rendered under such conditions as above outlined.

In the minds of your committee there is only one way that these people can be given adequate medical services and that is subsidization, with the funds provided by taxation. This subsidization should provide central laboratories including x-ray equipment, adequately staffed, where laboratory diagnostic measures may be carried out and results furnished to the practicing physician in that community. With this done, then the cost of giving medical care in the application of the knowledge thus obtained will be lowered and the people receive scientific and efficient care. The Washington plan can be so modified as to meet these rising demands.

So far as hospitalization is concerned, our recommendation remains the same as offered in report of last year which was adopted by this association. As a matter of interest to the association we wish to report phenomenal growth of hospital associations. From December 1920 to January 1934, a period of fourteen years, we had 50,000 subscribers in the United States to hospital group plans. The year 1935 saw this number quadrupled and the membership grew to 200,000. By January 1936 this membership had increased to 300,000. By January 1st, 1937, we find that the membership has reached the remarkable number of 700,000; in other words, the net increase in membership the past year is greater than the combined membership of all the preceding sixteen years, since the beginning of this plan for hospital care. The significance of this phenomenal growth is very apparent, viz., that the American people are enthusiastic about this plan of caring for their hospital bills. The vast majority of this rapidly growing membership is in institutions in which the plan is administered under the supervision of organized medicine and in obeyance to ethical principles.

In view of the above brief statements the committee is offering the following recommendations, the first of which is one of those approved last year which we feel should be reaffirmed:

1. That the Arkansas Medical Society disapprove the action of any of its members who may render medical services to clients of a group practicing contract medicine on a term basis, for the group, at a less charge than would be made to their own patients or who cares for the clients of such a group on a commission basis. This resolution not to apply to industrial groups as provided for in the by-laws of the Society.

2. That we recommend to the County Medical Society in which the Washington plan or some other similar plan may be applied, the setting-up of this modified plan so as to meet local needs; that as soon as this may be done, it be studied in a conference of the State Council and State Medical Economics Committee and, if deemed practical and approved, that it be referred to the County Medical Association for adoption or rejection.

3. That the program committee of our various County Medical Societies arrange for a discussion forum on the subject of Medical Economics at least twice a year.

Respectfully submitted,

A. C. SHIPP,
T. F. JONES,
R. B. ROBINS,
W. DECKER SMITH,
A. F. HOGE,
M. C. JOHN,
R. M. BLAKELY.

REPORT OF COMMITTEE ON SCIENTIFIC EXHIBITS

H. FAY H. JONES, Chairman

The Committee requested the various county medical societies to submit, either as individual doctors or as county medical societies, exhibits for the scientific section. Also doctors, hospitals, and clinics in the various towns over the State were asked to send exhibits. The following exhibits were secured:

1. Dr. Roy R. Kracke and Mrs. Carl C. Garver, Department of Pathology, Emory University, Emory, Georgia: "Blood Cells and Diseases."

2. Metropolitan Life Insurance Company, New York City: "Public Health Aspects of Cardiovascular-Renal Conditions."

3. American Medical Association, Chicago, Illinois: "Histopathology of Cutaneous Syphilis."

4. American Medical Association, Chicago, Illinois: "What the Public is Thinking About Health."

5. Drs. Caldwell, Mahoney, and Calcote, Little Rock: "Objects Removed From Food and Air Passages."

6. Committee on Syphilis Control, Arkansas Medical Society: "Display on Syphilis."

7. Dr. Walter Carruthers, Little Rock: "Fractures and Orthopedic Deformities."

8. Dr. J. K. Donaldson, Little Rock: "Mesentric Thrombosis" (Arterial and Venous Types as Separate Entities).

9. Dr. M. J. Kilbury, Little Rock: "Tularemia of the Breast."

10. Drs. Pat Murphey, J. Wahlin, and A. DeGroat, Little Rock: "Torulosis."

11. Dr. H. S. Thatcher, Little Rock: "Specimens of the Civil War Period."

12. Drs. Carruthers and Kilbury, Little Rock: "Bone Tumors."

13. Mrs. Richardson, Librarian, University of Arkansas Medical School, Little Rock: "Historical Books in the Library of the University of Arkansas Medical School."

14. Dr. T. L. Robinson, Little Rock: "Anatomical Display."

15. Drs. George F. Jackson and M. J. Kilbury, Little Rock: "Dermatology and Pathology."

16. Arkansas State Board of Health, Little Rock "Sanitation."

17. Drs. H. Fay H. Jones and T. Duel Brown, Little Rock: "Kidney and Bladder Stones."

While we appreciate the splendid response to our request for exhibits, we are not satisfied with the results, inasmuch as the majority of exhibitors are Little Rock men and we feel that the doctors over the state should contribute to the success of the scientific medical exhibits. We all have some interesting specimens and we all have some interesting cases, which would be very acceptable to these exhibits. If we could develop a spirit of rivalry, friendly, of course, in working out exhibits of the various lines of work in which we are interested, the result would be of benefit both to the doctor submitting the work and those permitted to see the results of his research. This committee believes that this really would stimulate medical research, which we all need.

May this committee recommend that all doctors, clinics, and hospitals, be urged to begin now to plan for a scientific exhibit next year. We hope that the interest in this department will be so great that members of the Society will voluntarily offer exhibits in place of waiting to be solicited by the committee. May we further recommend that sufficient space be allotted to the scientific section so that no exhibitor will have to be turned down for lack of space.

I feel that I, as Chairman of the Scientific Exhibit Committee, owe an apology to my good friend, Dr. George F. Jackson. Due to my being so very busy I forgot to list his name to appear on the program as an exhibitor. Because of the lateness of notification several other exhibitors were not listed. We regret this very much and hope that next year all notifications will be received before the official program goes to press.

H. FAY H. JONES,
GEORGE V. LEWIS,
W. E. GRAY.

Dr. Thos. Douglass, Ozark, advised that the Report of the Committee on Necrology would be submitted at the Memorial Services to be held Tuesday morning, April 13th, 1937.

REPORT OF CANCER CONTROL COMMITTEE

D. W. GOLDSTEIN, Chairman

The greatest movement for the Control of Cancer in recent years has been the organization of the Women's Field Army.

Each woman who enlists as a recruit will contribute one dollar to the Cancer War Chest. Men, too, may support the movement as contributing members. Thus thousands of dollars will be available to carry on vital educational work. Of this total, seven-tenths will be spent where it is raised by the State Executive Committees of the Army. One-tenth will be placed in a contingent fund and the rest will be used by the General Staff in the National Office of the American Society for the Control of Cancer for its field work.

The Women's Field Army is unusual in many respects. Except for a few members of the General Staff, loaned by the American Society, it will be officered and managed by volunteers in each state and county. It will work under the direction and with the cooperation of recognized leaders of the medical profession. State and county officers of the Army will come from those prominent in local activities of women's organizations.

This is the first campaign of many to follow. As it is the first, it will be the most difficult.

This campaign has the endorsement of the American Society for the Control of Cancer, American Medical Association, College of Surgeons, and College of Physicians. Their campaign began the week of March 2nd, 1937. The chairman is Mrs. Grace Poole, of Brocton, Massachusetts, long a prominent club woman, President of General Federation of Women's Clubs in 1932. Mrs. Marorie B. Illig, of Onset, Massachusetts, is the Field Representative. Their set-up in each state is as follows: Advisory Committee, Executive Secretary-Treasurer.

Mrs. W. F. Lake, of Hot Springs National Park, is State Chairman. She appoints local chairmen for the drive. Their program is educational talks on cancer by physicians of local societies, radio talks and newspaper publicity. Already through publicity there have been a number of letters asking advice from individuals suffering with cancer.

Where we, as members of the medical profession, come in is not only by giving our wholehearted support to this campaign, which will be held in this state the week of April 17th, 1937, but we must become cancer-conscious and be prepared to give complete physical examinations and advice to the number of women who will come to us for advice.

Cancer of the breast and uterus will be emphasized. We should brush up on physiology and pathology of the breast, familiarize ourselves with the biopsy methods and Schiller's test for the uterine cervix, review the diagnosis, skin, lip and oral new growths.

There is every reason to believe that the club women will do their part. It is up to the medical profession to help them keep on the job of fighting cancer with knowledge.

Respectfully submitted,

D. W. GOLDSTEIN,
M. J. KILBURY,
J. S. STELL.

REPORT OF COMMITTEE ON ARRANGEMENTS

H. FAY H. JONES, Chairman

I should like to take this opportunity to tell you that, as representative of the Pulaski County Medical Society, the local Entertainment and Arrangement Committee wishes to express how happy we are to be your hosts and to say that it is our sincere wish that all who attend the 62nd Annual Session of the Arkansas Medical Society, will enjoy the entertainment that has been planned for you. If you really enjoy being our guests, tell our President, Dr. Paul Mahoney; if not, tell us on the Q. T. The whole of the Pulaski County Medical Society is at your bidding and if there is anything you desire, just make your wants known.

There may be those of you here who failed to receive a written invitation to the Open House honoring Dr. Heyd, at my home, at No. 1 Armistead Road this afternoon from 5:30 to 7:00 o'clock. It did not seem practical to mail invitations to all the membership of the State Medical Society but it was the desire of myself and Mrs. Jones that all in attendance at this meeting come out between these hours, meet Dr. Heyd, and enjoy a little social interim together before the meeting tonight.

As you know, the time is short, since the evening program begins at eight o'clock, so it will of necessity have to be a come and go affair. I trust that all of you will drop in, and would ask that you leave the meeting promptly. Cars will be provided for those who do not have transportation. If you have your own car, we would appreciate your using it and asking someone to go along with you. For your convenience I am having a red lantern placed on Highway No. 10 at the point for you to turn to the left. My home is one block from this turn. You probably will know the place by the amount of noise. The affair is strictly informal and you are to bring the wives.

I should like at this time to thank the following members of the local Entertainment and Arrangement Committee for their most valuable assistance in putting on this part of the meeting: Dr. F. O. Rogers, Dr. Hoyt Allen, Dr. Harvey Shipp, Dr. Bryce Cummins, Dr. Clyde Rodgers. I am also very grateful to Dr. Joe Shuffield, Dr. J. M. Kilbury, Dr. George F. Jackson, Dr. T. Duel Brown, Dr. H. W. Hundling and to the ladies of the Pulaski County Medical Auxiliary for their cooperative help.

Respectfully submitted,

H. FAY H. JONES.

REPORT OF THE COMMITTEE ON MATERNAL HEALTH AND CHILD WELFARE

S. A. THOMPSON, Chairman

The Committee on Maternal Health and Child Welfare submits the following report:

The Committee met in Little Rock last July and selected two circuits, one in the Northern half of the State and one in the Southern half of the State, with the geography of the country and distribution of physician in mind. The purpose of this arrangement was to have a lecture in one town once each week, until the course was completed thus having the lecturer doing the traveling instead of the physicians.

An alternative plan was adopted selecting six towns, with the same geography and distribution of physicians in mind, in which the course would be held every night, thus forcing the physicians to do the traveling.

We are sorry to say that the Bureau at Washington accepted the latter plan and Obstetric courses were held at Jonesboro, Harrison, Fort Smith, Hope, Monticello and Conway every night for five nights lasting about two hours. We have been unable to get accurate reports from every town in which this course was held, however, those from which we have heard have been very enthusiastic. According to the estimate to which we are able to arrive, more than three hundred physicians heard at least a part of these lectures. Among this group were a good many irregulars and colored physicians.

We wish to thank Dr. Davis for the clear, concise and conservative work done by him. He was very kind and courteous, answering all questions with ease and clarity. His lectures, slides and motion pictures were of the very highest order and very much worth while.

We also wish to thank the physicians in the towns in which these courses were held for their kindly cooperation in securing meeting places for these courses.

Also, we wish to thank and compliment our state secretary, Dr. W. R. Brooksher, for his cooperation and the amount of work and time spent on this proposition. His aid was of very great value to this committee.

When additional courses of any educational character for the physicians of the State Medical Society are sponsored by the Society, it is our suggestion that the circuit plan of putting on these courses be insisted upon, that is selecting five towns and having one night each week in each town instead of five nights one week in each town. These courses are put on for the physician and it will be much easier for one man to travel every night or evening than it will for all the physicians. At several of the above towns where these courses were held some of the physicians traveled as high as seventy-five miles and back each night to attend these courses. For busy physicians to do this every night for five nights in succession works a tremendous hardship on them. If they could make this trip one night each week for five weeks the attendance would be much greater and much easier for the busy doctor.

Respectfully submitted,

S. A. THOMPSON, P. H. PHILLIPS,
E. H. WHITE, J. H. FOWLER,
S. B. HINKLE, H. C. DORSEY,
S. J. MATTHEWS, C. A. ARCHER.
J. O. RUSH,

REPORT OF THE COMMITTEE ON POSTGRADUATE INSTRUCTION

D. A. RHINEHART, Chairman

Pursuant to the action of the Committee on Postgraduate Instruction at the meeting at Hot Springs National Park last year, two two-day periods of postgraduate instruction have been conducted at the Medical School in Little Rock.

The first of these was held September 30 and October 1, 1936. At this meeting Dr. Russell L. Cecil of New York and Dr. George L. Carlisle of Dallas were the guest speakers. The registered attendance was 149.

The second meeting was held January 13 and 14, 1937. At this meeting the guest speakers were Dr. W.

C. Alvarez of the Mayo Clinic, Dr. Curtice Rosser of Dallas, and Dr. Frederick F. Boyce of New Orleans who is Dr. Urban Mass' associate. The registered attendance was 83. It is believed that this lowered attendance was due to unpleasant weather conditions.

At both these sessions a full two-day program was presented. The program is too long to reproduce in this report, but copies are attached hereto.

Inasmuch as this type of postgraduate instruction was undertaken largely in the form of an experiment, the Committee would be glad to have the reaction of the House of Delegates as to its success. The Committee would further like to have the opinion of the House of Delegates as to the advisability of proceeding with meetings similar to these during the coming year.

The attendance was such that the financial success of this sort of program is assured. The Committee has a sufficient reserve to care for whatever contingencies may arise.

The Committee would be glad to have the House of Delegates designate some authority to audit the accounts of the Secretary.

REPORT OF COMMITTEE ON SYPHILIS CONTROL OF ARKANSAS MEDICAL SOCIETY

LOUIS G. MARTIN, Chairman

The following is a report of your committee appointed on December 10th, 1936, by your President:

Your committee met December 17, 1936, in conjunction with Dr. W. B. Grayson, State Health Officer, and several members of his staff and made the following recommendations to the questionnaire sent out by the Surgeon General of the U. S. Public Health Service:

1. The system of notification most suitable to physicians, patients, and health agencies.

Ans. The committee recommends that all cases of syphilis be reported to the county health officers and directors of health units, who in turn shall report them to the State Health Department by number, race, sex, age and type of infection, primary, secondary, etc.

2. The additional laboratory facilities needed for diagnosis of syphilis.

Ans. It is recommended that adequate laboratory facilities and personnel be supplied by the State Health Department for the diagnosis of only indigent cases of syphilis.

3. The policy recommended in the distribution of anti-syphilitic drugs.

Ans. It is recommended that all anti-syphilitic drugs be placed in the hands of the State Health Officer, who in turn shall distribute them, at his discretion, upon application from the county health units, for the treatment of indigent patients.

4. The adequacy of free treatment facilities for those who cannot pay physician's fees.

Ans. It is recommended that all indigent cases of syphilis be treated under the direction of, or by the County Health Officer, who shall work under the supervision of a trained physician from the State Health Department. Indigency to be determined by the county health officer.

5. The nature and extent of additional facilities needed.

Ans. Due to the fact that this is necessarily an educational program, it is recommended that there be added to the State Health Department a full time director to head the Division of Veneral Disease Control, with adequate personnel to carry on this program.

6. The physician's part in the application of epidemiologic methods for the control of syphilis.

Ans. It is recommended that a more intensive educational program be put on for the layman, stressing the necessity of early and adequate treatment, which should be continuous until the patient is dismissed by the physician; and that a more definite follow-up method be instituted.

7. The possibility of developing minimum standards of treatment for early syphilis.

Ans. It is recommended that the minimum standards of treatment of the Advisory Committee to the U. S. Public Health Service outlined in Treasury Department, U. S. Public Health Service reprint No. 54 from veneral disease information, Volume 17, Number 1, January 1936, entitled "Recommendations for a Veneral Disease Control Program in State and Local Health Departments" be accepted.

8. The availability of hospital beds for treatment of cases needing hospitalization.

Ans. Due to the fact that hospital beds now available are very inadequate, it is recommended that steps be taken to secure more available hospital space for treatment of complicated veneral disease cases.

9. Methods for the more adequate prevention of congenital syphilis through recognizing and treating the disease among pregnant women.

Ans. It is recommended that an educational campaign be instituted with the laymen and with the physician.

10. The lines along which informative and educational programs should be conducted.

Ans. It is recommended that a more intensive program be carried on for both the layman and the physician through moving pictures, the press, radio, lectures, etc.

11. The possibilities of prophylactic measures being taught and administered through physicians' offices, outpatient hospital services and clinic, with the thoroughness and precaution governing Army and Navy procedures.

Ans. It is recommended that the value of adequate prophylactic measures be taught by physicians to the following groups: Schools, Colleges, Parent Teachers' Associations and other allied organizations.

Your committee has also arranged for an exhibit at your annual meeting on syphilis control.

I wish to thank each member of the Committee and Dr. W. B. Grayson for the excellent cooperation.

Dr. Grayson requested that one of your committee attend the National Conference in Washington, D. C., on Syphilis Control at the expense of the state. Dr. D. W. Goldstein, Fort Smith, attended this meeting.

Respectfully submitted,

LOUIS G. MARTIN,
D. W. GOLDSTEIN,
GEO. F. JACKSON.

REPORT OF COUNCIL

S. J. WOLFERMANN, Chairman

We wish to present a short summary of the Council activities since the last regular meeting in Hot Springs National Park.

After our last meeting we coasted along during the summer with no difficulty. The Councilors contacted each county society, studying the transportation facilities of the state, so they could make their recommendations as to re-districting the councilor districts. This was later taken up at the December meeting, and a report was in your April Journal.

In the late summer it was necessary for the Council to get quite active, because men not in this society had been appointed as consultants in surgery at the Veterans Facility at North Little Rock. Without going into the many details, but after a government investigator had come down from Washington early this year, these consultants were relieved of their positions, and we feel quite happy that this was accomplished in the face of some very strong political opposition.

At the mid-winter meeting of the Council, Doctor Vinsonhaler explained to us the bill he had planned, to establish a hospital in Little Rock to be operated in connection with the Arkansas School of Medicine. He asked our approval and support as individuals, which was given.

The Council adopted a resolution requesting the governor to retain the professional heads of the state institutions under the new administration.

The Secretary was requested to advise with heads of the State Medical institutions, requesting that if and when they did medical work and received fees for the same, that these fees be comparable to those charged by private physicians, so that the state would in no sense be in competition with private physicians at a reduced fee.

The re-districting of the councilor districts was discussed, changes recommended and will be presented to the House of Delegates for action at this meeting.

A committee was appointed to report at this meeting in regard to the study of the medical care to veterans and the future extension of this service, as it was reported to the Council that many people were taking advantage of this service who were not entitled to it.

The Council voted to permanently discontinue the reporting of scientific sessions of the Society by a stenographer. As you will know, this has been discontinued for the past two years and apparently has been satisfactory. We have received no objections, and it has been quite a financial saving.

The Council ordered the purchase of the pamphlet, "On the Witness Stand," and it has already been mailed to you, and it is hoped that inasmuch as we have spent the money for these pamphlets, you will read and digest them thoroughly, so that you will be better prepared to discuss and act on the many changing problems in medical practice.

Nineteen thirty-seven, as you know, was a legislative year, and the chairman of the legislative committee and our legal adviser, Mr. Diesch, discussed the arrangement of the legislative program.

The meeting of the legislature is past history. It was the most active in many, many years, also the most expensive to your Society, but we were confronted with new menaces which needed to be broken up. On the whole, our legislative committee was most successful, though they kept the Council busy on several different occasions.

You are all familiar with the resolution passed at the last meeting of the House of Delegates, as recommended by the Council, in regard to putting names in insurance company directories. It might interest you to know that our delegates and our most able secretary carried this resolution to the American Medical Association, where it was most enthusiastically received and was passed by the delegates of the American Medical Association, being, I believe, the first time any resolution of this type has originated in the Arkansas Medical Society. We understand it is now included in the American Medical Association's rules of ethical practice.

We have had many minor things, concerning which we will not bore you, but we wish at this time to acknowledge our appreciation of the most wonderful support given by all the county medical societies and their officers throughout the year, particularly when we have written them for opinions, and most particularly on the several occasions when it was most needed to get quick action to representatives and senators, when the distress signal was sent out by the legislative committee.

Again, as a parting word, we wish to remind you that there is still much talk about socialized medicine, contract practice and state medicine. We are more than ever convinced in our belief that a unified front of ethical physicians who are familiar with all phases of the medical practice is all that is necessary to defeat this regimentation and the desires of fanatics and philanthropists. Unity among ourselves should be our first line defense.

THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY

A. S. BUCHANAN, Secretary-Treasurer

Since the report made to the Sixty-First Annual Session of the Arkansas Medical Society, the State Medical Board has held two regular semi-annual meetings and one special meeting. No vacancies have occurred since the last report but one appointee who, at that time, had not been seated was duly sworn in as a qualified member at the May, 1936, meeting. The Board in the past has ended its fiscal year on the second Tuesday in May. However, during the recent session of the legislature the date of this spring examination was set forward to the third Thursday in June of each year in order that the graduates of the University of Arkansas and other schools might receive their diploma before taking the examination as the medical law requires. We have been having considerable trouble lately in our reciprocal relationship with other states because we have been allowing candidates to take the examination prior to their graduation although no licenses were issued until after the candidates had reecived their diplomas.

The term of office of Dr. L. T. Evans, Batesville; Dr. W. T. Lowe, Pine Bluff; Dr. W. H. Mock, Prairie Grove, and Dr. A. S. Buchanan, Prescott, will expire upon termination of the next regular semi-annual meeting of the Board which, as has been stated, will be the third Thursday in June, thus causing four vacancies which will be filled by appointees of the Governor from a list of recommendations made to him by the Arkansas Medical Society. The Congressional Districts affected by these

vacancies are the Second, Third, Sixth and Seventh. None of the retiring members are eligible for re-appointment because of the fact that all have served two full four-year terms.

A total of forty-seven candidates for certificate of license by examination appeared before the Board during the past year. The schools represented in this number are as follows:

University of Arkansas	44
Tulane Medical School	1
University of Tennessee	1
Dusseldorf Medical School	1

All candidates for license by examination made successful passing grades and presented satisfactory evidence of having graduated from a reputable medical school and all were issued license to practice medicine and surgery in Arkansas, except the one representing Dusseldorf Medical School, a German institution.

During the year the Board received twenty-seven applications for license by reciprocity from other states and a total of thirty licentiates of the Board were endorsed to other states for license by reciprocity. Of the twenty-seven applications for license by reciprocity, only twenty-two have been issued a license, two applications are now pending, two withdrew their application and their fees were refunded and one was rejected. One applicant was accepted from the National Board for licensure in Arkansas and the reciprocal relationship carried on between Arkansas and other states during the year is as follows:

State	No. Endorsed for Licensure	No. Licensed by Reciprocity
Arizona	1	0
California	1	0
Georgia	2	0
Illinois	2	1
Indiana	3	0
Louisiana	6	2
Maryland	0	1
Michigan	1	1
Minnesota	0	1
Mississippi	0	1
Missouri	0	3
New Mexico	1	0
Ohio	2	1
Oklahoma	2	2
Tennessee	0	7
Texas	7	1
West Virginia	1	0
Wyoming	1	0
Total	30	21
Endorsement National Board	0	1
Grand Total	30	22

Seven licenses were revoked by the Board during the past year, two being permanently revoked, all were charged with having been convicted of a crime envolving moral turpitude. All except one of the seven revoked are persistent violators of the Harrison Narcotic Law and have been the subject of numerous reports from the United States Narcotic Bureau. Along this line I might state that the government is placing a greater responsibility each year upon the different state boards in an effort to minimize narcotic violations.

Those who have given some thought to the previous reports submitted by the Board will recall that almost every one has mentioned something about the problem it has been facing with reference to licensing graduates of foreign medical schools. Several times has it been stated that this was a major problem and one over which the Board has absolutely no control. Yet, we are still faced with this problem and during recent months the Board has received, perhaps, some undue criticism concerning this matter. This is not only a problem of the Arkansas Board but it is a perplexing problem to every medical board of the United States and is a nationwide question with the medical profession as a whole. Quoting from a Bulletin published recently by the Federation of State Medical Boards of the United States:

"The question of the foreign graduate—whether native or foreign—has, within recent years, become an acute concern. The underlying causes precipitating this situation are well known. Suffice it to say that a clamorous and seemingly an uncontrollable urge on the part of the academically trained American born youth to embrace medicine as a life career, coupled with the pronounced social unrest prevailing on the European continent have been contributing factors. Of the 3,000 medical students who entered European schools in 1930-1931, many have already or soon will be trekking homeward. In the last academic year, 1935-1936, there were enrolled in European schools, 1,517 American students. The lack of adequate teaching and training facilities for these foreign students in many if not most of these schools, as well as an unwillingness to extend licensure privileges, after completion of their studies, to such foreign graduates, have precipitated problems of such magnitude as to command serious attention. The foreign born professional refugee, seeking solace and security within our shores, likewise presents a problem, even though it may not be the same magnitude. During the five-year period 1927-31, 1,157 native European graduates were examined in the United States, of whom 50 per cent failed, as contrasted with 4.5 per cent of failures among American trained graduates."

Now, one might say upon giving the matter a mere thought that this should be no problem, that all that would be necessary would be merely to refuse a foreign graduate the privilege of taking the examination, or to refuse to issue a license by reciprocity with a state that had permitted the applicant to take its examination and had issued him a license. Such, however, is not the case at all because to do so would mean that the Board must arbitrarily adopt a ruling to that effect. The law governing the action of the Board states that it may adopt any ruling or regulation which it deems necessary so long as it does not, in any way, conflict with the laws of the state or of the United States. The courts of the United States have maintained that the exercise of power to abrogate treaties is clearly beyond the jurisdiction of the Judiciary and lies entirely within the province of the political departments and that a state or city official can not exercise this authority, for all powers concerning foreign affairs are vested in the Federal Government. In most instances the Federal Government has an agreement with the different foreign countries that "the nationals of each party shall be permitted to engage in professional and commercial work of every kind without interference and upon the same terms as nationals of the state of residence." In fact, this Board refused a foreigner entrance to our examination last May and he promptly obtained a court order

compelling us to examine him. Therefore, the Board can do absolutely nothing until certain changes have been made in the laws, both Federal and State, giving it proper authority to act .

W. H. Mock, Prairie Grove, reported as Delegate from the Society to the 1936 session of the American Medical Association, calling attention to the fact that the proceedings of this session had been published in both The Journal of the American Medical Association and in the Journal of the Arkansas Medical Society. Dr. Mock commented upon the seriousness with which the members of the House of Delegates of the American Medical Association carried on their proceedings. He referred to the adoption of the resolution declaring unethical the practice of physicians inserting their names in lay-sponsored commercial directories, a resolution originating in the Arkansas Medical Society and also commented upon resolutions adopted which dealt with the revocation of licenses of practitioners convicted of the narcotic laws and of felonies and upon the matter of alien physicians applying for licensure in the Untied States.

S. W. Douglas, Eudora, reported on the 1936 session of the Mississippi State Medical Association which he attended as fraternal delegate from the Arkansas Medical Society. Dr. Douglas commented upon the high class scientific program which was presented and reported that the physicians of Mississippi had found their law providing for the care of indigent patients, similar to the statute recently enacted in Arkansas, to be a satisfactory arrangement for the physicians.

Hon. Peter A. Deisch, attorney for the Society, commented briefly upon the 1937 session of the Arkansas legislature and read extracts from a report which he had prepared upon the laws of Arkansas as affecting physicians, to be distributed to the membership at a later date.

REPORT OF TREASURER

Balance Reported at Last Annual Meeting, April 27, 1936		$ 9,074.26
Receipts during year:		
Nov. 3, 1936, Recv'd. Secretary account dues	$1,500.00	
Jan. 8, 1937, Recv'd. Secretary account dues	1,000.00	
Apr. 1, 1937, Recv'd. Secretary account dues	3,000.00	
Total		$5,500.00
Jan. 8, 1937, Recv'd Secretary Journal Acct.	$2,500.00	
Apr. 1, 1937, Recv'd. Secretary Journal Acct.	2,000.00	
Total		4,500.00
Jan. 1, 1937, Int. on Saving Acct.	23.75	
Total receipts during the year		10,023.75
Total funds available during year		$19,098.01
Disbursements during year, Vouchers No. 674 to 177 inclusive		8,777.17
Balance on hand at close of business April 10, 1937		$10,320.84
April 12, 1937, Statement from W. B. Worthen Co., Bankers		$ 4,217.94
April 12, 1937, Statement from Union National Bank		6,102.90
		$10,320.84

There is one check outstanding for $1.50, Union National Bank.

R. J. CALCOTE, Treasurer.

REPORT OF THE SECRETARY

The membership of the Society today is 944 as compared with 925 at this time last year. Credit for this good showing is due the county society secretaries who have made diligent effort to keep all members in good standing. The total membership for 1936 was 1,032. At this time there are 140 physicians delinquent who paid assessments in 1936.

During the past year the secretary attended seven councilor district society meetings, the American Medical Association at Kansas City, the annual conference of state secretaries in Chicago, the Arkansas county secretaries conference, and a number of county society meetings and committee conferences.

The Journal has gained new advertising within the year which has permitted an increase in the total number of pages published. In addition to the papers read at the 1936 session, a number of papers read before county and district meetings have been published. It is hoped to continue this policy. Members are again reminded that it is the support of our advertisers which makes possible the publication of an official society organ. These advertisers have every right to expect a good measure of reciprocity.

Continued stress has been placed during the year upon the urgent necessity of the individual physician becoming informed upon all phases of state and socialized medicine. An excellent pamphlet, "On the Witness Stand," was mailed each member which provides a number of convincing arguments for the opposition of organized medicine to all forms of lay or governmentally-controlled practice of medicine.

The county societies are neglecting a great opportunity in not actively engaging in the field of public relations. The public is sympathetic to the physician's problems, is desirous of obtaining health advice, and naturally looks to the physician to assume the lead in these matters. If the physician does not undertake this, some one less qualified will certainly grasp the opportunity. Medical societies should arrange for more active cooperation in all civic enterprises, the Chamber of Commerce, the civic clubs, welfare agencies, in fact, in any and all associations which may directly or indirectly deal with the practice of medicine or with the individual physician. Such participation will permit a hearing from organized medicine at a time when harmful projects are under consideration, resulting in their

abandonment. It is noted with appreciation that a number of county welfare boards comprise a physician member. Each of these boards should be so constituted, but until such time as that aim may be fulfilled, it is suggested that the county medical society arrange for the provision of medical advice in the operations of these agencies.

The need for combining smaller county medical societies to provide more satisfactory organizations for the extension of medical knowledge throughout the profession continues. A number of county societies meet but once a year affording no opportunity for scientific programs of value. A combination of two or more societies will correct this condition. Such combined societies are now in operation in several sections of the state and making gratifying progress.

The past year has been one of much activity. Problems in great number have arisen. These have required the hearty cooperation of the officers and the membership. It is with gratitude that the secretary acknowledges the cordial helpfulness which has been received from all members and the officers.

Respectfully submitted,
W. R. BROOKSHER.

The House of Delegates then unanimously adopted the following amendments to the Constitution and By-Laws as proposed at the 1936 session:

Proposed Amendment to Article IV, Section 2 of Constitution:

"Section 2. Active Membership. The active membership of this Society shall comprise all the active members of its component societies. Only such a person is eligible for active membership in a component society as (1) possesses the degree of Doctor of Medicine, issued by a medical college which at the time such degree was conferred was approved by the Council on Medical Education and Hospitals of the American Medical Association, and (2) holds also an unrevoked license to practice medicine and surgery issued by the board of medical examiners which consists of members recommended by this Society. The eligibility requirements set forth in the preceding sentences are not to apply, however, to members in good standing on any component society at the time of the adoption of this section."

Proposed Amendment to Chapter IX, Section 5, By-Laws:

"Section 5. Each county society shall judge of the qualifications of its own members; but, as such societies are the only portals to this Society and to the American Medical Association, every reputable physician who possesses the eligibility qualifications for membership required by Article IV, Section 2, of the Constitution of this Society, and who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. No physician or surgeon who solicits patients or business for himself or for an association or other organization of which he is a member, or by which he is employed, or in which he is interested, shall be eligible for membership in this Society, and no physician or surgeon who works for, is employed by, or is interested in, any association or organization which solicits patients, members or business shall be eligible for membership in this Society. Any member of this Society who shall hereafter violate any of the provisions hereof shall be expelled from the Society. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member."

By motion the House of Delegates instructed the Secretary to send flowers to President-Elect Johnston, ill in a Little Rock hospital, and to send telegrams of sympathy to Vice-President A. G. Sullivan, Hot Springs National Park; Past-president H. D. Wood and to A. M. Gibbs, all absent because of illness. By motion, the Past-presidents were requested to select a committee from their number to call upon President-Elect Johnston.

The House of Delegates was then briefly addressed by Charles Gordon Heyd, President, American Medical Association.

J. W. Amis, Sebastian County, presented the following resolutions which were referred to the Reference Committee:

"Whereas, the Sebastian County Medical Society in session November 10th, 1936, at Fort Smith, Arkansas, did discuss the advisability of each family being supplied with a certified copy of the birth certificate of each newborn of the family, and

"Whereas, the Sebastian County Medical Society feels that this is advisable for two reasons: (1) It is a family record of great value, especially in the future life of the child; (2) It will aid in causing birth certificates to be filed by the physician present at the birth of the child, and

"Whereas, this will both increase the value of the family records and the records of the Bureau of Vital Statistics, and

"Whereas, the registrar of the Bureau of Vital Statistics in each township receives a fee of twenty-five cents for each certificate registered with him,

"Therefore, Be it Resolved, that the Sebastian County Medical Society urges the Arkansas Medical Society to go on record as favoring this procedure, and that the Arkansas Medical Society request the State Board of Health to require of the registrar of each township that he supply by mail to the parents of each newborn child a certified copy of the birth certificate of that child."

"Whereas, the Sebastian County Medical Society in session November 10th, 1936, at Fort Smith, Arkansas, did endorse the compulsory immunization of all children against diphtheria as a prerequisite for admission to the public schools, and

"Whereas, this procedure would further decrease the death rate from diphtheria in the State of Arkansas,

"Therefore, Be it Resolved, that the Sebastian County Medical Society do go on record as urging the Arkansas Medical Society to endorse this movement for the improvement of the general health of the people of the State of Arkansas, and

"Be it Further Resolved, that the Sebastian County Medical Society requests the Arkansas Medical Society to adopt such a course of action as may be necessary to cause the compulsory immunization of all children against diphtheria before admission to the public schools to become a law of the State of Arkansas."

The following Nominating Committee was regularly selected:

B. M. Stevenson, First District; S. J. Allbright, Second District; J. O. Rush, Third District; J. M. Lemons, Fourth District; A. D. Cathey, Fifth District; J. C. Graves, Sixth District; W. T. Wootton, Seventh District; S. C. Fulmer, Eighth District; J. G. Gladden, Ninth District, and Thos. Douglass, Tenth District.

The following nominations to fill expiring terms on the State Medical Board of the Arkansas Medical Society were regularly selected:

Second Congressional District:

L. T. Evans, Batesville.

J. T. Matthews, Heber Springs.

T. C. Guthrie, Smithville.

Third Congressional District:

Fount Richardson, Fayetteville.

D. L. Owens, Harrison.

Clyde McNeil, Rogers.

Sixth Congressional District:

J. M. Proctor, Hot Springs National Park.

E. A. Callahan, Carlisle.

C. W. Dixon, Gould.

Seventh Congressional District:

D. E. White, El Dorado.

R. B. Robins, Camden.

E. E. Barlow, Dermott.

The House of Delegates then adjourned.

FIRST GENERAL SESSION
APRIL 12th, 1937

The first general session was called to order by President Fletcher.

The invocation was given by Rev. Calvin B Waller, Second Baptist Church, Little Rock.

The Society was welcomed by Hon. R. E. Overman, Mayor of the City of Little Rock, and by Paul Mahoney, President, Pulaski County Medical Society.

H. T. Smith, McGehee, responded to the address of welcome.

RESPONSE TO ADDRESS OF WELCOME,
H. T. SMITH
McGehee

Speaking for the membership from the other seventy-four counties of the state, I want to say first that we are glad we are here. We feel at home in Little Rock, and I sometimes wonder if there is not a real reason for this feeling that we are at home here.

As most of you probably know, the first white woman to live in Little Rock was the wife of a doctor. The husband of this good woman, Dr. Mathew Cunningham, a pioneer physician, was a graduate of the University of Pennsylvania, the class of 1808. This great pioneer physician also served as the first mayor of the great city of Little Rock. We feel that the foundation, the sentiment put into the building of this great city was moulded and formed to a great extent, by the medical profession.

Other doctors played an important part in this great work here: Dr. Robert A. Watkins, Dr. James N. Menefee, Dr. John H. Cocke, another of these great physicians, was the first county judge of Pulaski County, and was elected one of the Representatives from Pulaski County in the first State Legislature.

Dr. Bushford W. Lee, Dr. John T. Fulton, Dr. John R. Conway, Dr. Allen Sprague, Dr. Lorenzo Gibson and his son, Dr. Lorenzo P. Gibson, Dr. A. W. Webb, Dr. James A. Didwell, Dr. James A. Didwell, Jr., Dr. Matt S. Didwell, Dr. Roderick L. Dodge, Dr. Charles E. Nash, Dr. Jesse M. Reynolds, Dr. William A. Cantrell, Dr. William E. Wisdom, all of these great men practiced in Arkansas prior to the civil war.

Such pioneer physicians as these were, I feel, in a way, responsible for the splendid hospitality and good fellowship we enjoy at the present time.

Attendance at these meetings means acquaintance; acquaintance means confidence, and confidence makes friendships. These medical meetings keep our friendships in repair. To my mind one of the outstanding proofs that these medical meetings are real and right is when we witness without envy, the advancement of our friends to positions of honor and trust. This is friendship in action, and the poet has said:

"I would rather have one rose from the garden of a friend,
Than to have the choicest flowers when my stay on earth must end.
I had rather have one pleasant word in kindness said to me,
Than flattery when my heart is filled and this life has ceased to be,
I would rather have a loving smile from friends I know are true,
Than tears shed around my casket when this world I bid adieu."

E. E. Barlow took the chair and President Fletcher read his address to the Society (page 1).

The Scientific Program then continued in accordance with the program.

MEMORIAL SESSION
APRIL 13, 1937
8:00 A. M.

(Joint session with the Auxiliary.)

The Memorial Session was called to order by President Fletcher.

The invocation was given by Rev. G. Gerald Sias, First Christian Church, Little Rock.

A quartette sang a selection.

The Memorial address was read by Thos. Douglass, Ozark, Chairman, Committee on Necrology.

It is highly fitting that in the midst of the annual meeting of the Arkansas Medical Society, we pause at this hour, in this appropriate setting, this place where our meetings are held and our work done, with these beautiful flowers in whose faces, as Mrs. Nora Wann said, one sees the heart of God, and the lovely music which lifts us above the smaller abstractions of life into a most wholesome atmosphere, to pay a tribute to the memory of our good fellows who are with us no more.

Since our last meeting in April one year ago thirty of our members have passed away. To some of them it meant laying down the burden of life which had grown too heavy and life's termination to them was a blessed relief. To many it was completing a normal life and they had lived about the natural term of years. Two died all too young, one at 38, and one at 39 years of age. One died while attending an obstetrical case. One was struck by a freight train and one died from an ambulance accident while taking a patient to a hospital. The average number of years in practice was 35. Three had practiced 56 years, the longest term of active practice. We record with deep interest their ages; two were under 40, one between 40 and 50, eight between 50 and 60, nine from 60 to 70, five from 70 to 80 and five were over 80, the oldest: James D. McKie of Vanndale was 84.

I think it was S. Weir Mitchel who wrote many years ago about the Conduct of the Medical Life and said: When Christ and his disciples healed the sick or brought the dead to life they only prolonged these lives; they did not confer immunity from natural death to which they came later in the natural order. Even the humblest doctor of medicine has added length of years to many of his patients. It was said of Sydenham that in one series of operations he added 20,000 years to the lives of his patients. We are sure that these our departed fellows saved many from dying, added many years to their lives, contributed hope and consolation and restored many to usefulness and a more normal life. W. F. Smith made many to walk, who, but for his aid would have been hopeless cripples. The great importance of pathology, the very foundation of all accurate knowledge and clear thinking about disease processes in the body is more highly appreciated in all the region around Fort Smith because Epler lived there many years. Ethical medicine stands on a higher plane around Mulberry because J. A. Wigley lived there. W. R. Hunt, strong, aggressive, capable, student of medicine, excellent diagnostician, made possible an excellent hospital and first class surgery in Johnson county. J. W. Walker was secretary-treasurer of the state Board of Medical Examiner for five years. A number served in the medical corps of the army. I have mentioned those I knew well. Others rendered efficient service in the state and county medical societies.

Death, which is as natural as birth, an inevitable accompaniment of any life we know, distresses us deeply. We cannot yet think rightly about it. It seems awful even if there is no more to it than we can see, the complete end of all our active work, our joy in living. Separation from loved ones who need our care. So many things left undone. So much better we might have lived.

And then to what borne are we going? As to any life after death no details are given. All our thinking on the subject is hazy and misty with speculation. Jesus Christ, greatest Teacher, greatest friend of man, told us little, only full assurance.

Termination of physical life, toward which we are steadily going, troubles and perplexes all of us. The question discussed by Mrs. Elsie Robinson in the Sunday Gazette is constantly uppermost in our minds. "Were there really two of you? What happened to that other part when the body died? Surely some day someone would find the answer. The church knows the answer already. Man is immortal soul." It does not help us greatly to be assured by the scientist, Dr. Stromberg, that the physical universe has a dual aspect, material and immaterial. Naturally, then, it is certain that all our conceptions of any future existence will be faulty, and accord very little with the fact.

Miss Louise Moulton, with a poet's vision, expresses a beautiful conception:

Process is in everything. I see
That everything is becoming—moving on,
Moving to some great end? I see no end.
But movement threading every phase and change
Uniting in one great meaning death and life.

For us who remain to carry on our loss is real. We miss these good fellows who gathered with us here just one year ago. We miss them.

"For them no more the blazing hearth shall burn
The busy housewife ply her evening care
No children run to lisp their sire's return
Or climb his knee the treasured kiss to share."

For us no more their smiling faces, cordial hand shake, cordial greeting. Their fellowship that makes life worth while to the busy, perplexed, troubled practitioner of medicine. Their good councils in the difficult case.

God's peace rest upon them.

IN MEMORIAM

James David Watts, Dumas, March 29, 1936.
Walter Monroe Matthews, Little Rock, May 2, 1936.
James Walter Walker, Fayetteville, May 4, 1936.
E. Burke Brown, Cotton Plant. May 6, 1936.
Wells Ferrin Smith, Little Rock, May 19, 1936.
William Terrell Fike, Warren, June 21, 1936.
Felix Melville Scott, Paragould, June 17, 1936.
Dee W. Kirby, Gurdon, July 17, 1936.
George Cohn, Piggott, July 23, 1936.
William Scafe Beaty, Poplar Grove, September 2, 1936.
Samuel Thomas Tapscott, Searcy, September 5, 1936.
Henry F. DeWolfe, Little Rock, September 4, 1936.
Gordon Hastings, Little Rock, September 14, 1936.
Edmond L. Hathcock, Locust Grove, September 25, 1936.
John Albert Burnett, Waldron, October 6, 1936.
James D. McKie, Vanndale, October 14, 1936.
John M. Taylor, Mena, November 15, 1936.
Ellis L. Gibson, Alicia, November 23, 1936.
James Knox Smith, Texarkana, December 28, 1936.
Davis Ewing Evans, Harrison, January 10, 1937.
John Rainey Parker, Berryville, January 12, 1937.
Joseph Griffin Waldrop, Hot Springs National Park, January 17, 1937.
Luke Parker, DeValls Bluff, January 21, 1937.
Ernest Glyndon Epler, Ione, February 22, 1937.
Horace Rudolph McCarroll, Walnut Ridge, March 4, 1937.
James M. Williams, Malvern, March 17, 1937.
Max O. Usrey, Blytheville, March 29, 1937.
William Richard Hunt, Clarksville, March 30, 1937.
Joseph L. Clemmer, Gentry, April 1, 1937.
James Arthur Wigley, Mulberry, April 4, 1937.

Mrs. J. T. McLain, President, Woman's Auxiliary to the Arkansas Medical Society, read the Memorial Address of the Auxiliary in the absence of Mrs. R. C. Kory, absent because of illness.

IN MEMORIAM

Tender memories fill our hearts during this memorial hour, so we assemble here with our friends in the shadow that has befallen them during this past year. We mention the names of Hazel Van Buskirk Rhinehart, Little Rock, August 19, 1936, Eva Eleanor Jay Smith, Fort Smith, September 10, 1936, Carolyn Allen Jones, Piggott, February 28, 1937, Selma Meek, Little Rock, April 7, 1937, in a spirit of the tenderest sympathy and in a keen kinship of feeling for those who have endured such grief.

Man's life upon earth is as the flower of the field which bloometh in the morning and is cut down in the evening. Therefore, are we not all travelers on the same road which leads to the same goal? All that we prize most highly is but lent to us and we must surrender it when the Power above demands it. We murmur not at His inscrutable decree, but pray for strength to bear our loss. We know that every night has it's morning and that after the hours of darkness come the hours of light—thereby giving to us a deeper and broader love for life and for humanity.

Let us hope that we, who are left behind, will live in purity and in godliness, so that we will bring honor to the memory of our dear ones who now dwell in Peace with God. Thus shall we erect for them a true and lasting memorial among men.

Sunrise—their feet have touched the hills of God;
Heaven's morning air blows sweet upon their brow;
They see the King in all His beauty now,
And walk his courts with full salvation shod.

"Looking towards Sunset," even here they caught
Prophetic hints of those far shining lands
That lie beyond—like one who understands
The sign, ere yet the miracle is wrought.

And so they went; ah! we who stay below,
Watching the radiance of their upward flight,
Who, who of us shall reach such lofty height
Or leave behind so fair an afterglow?

Signed,

Mrs. R. C. (Rose) Kory,
Memorial Chairman.

The quartette sang a selection.

The benediction was said by Rev. R. D. Adams, First Presbyterian Church, Little Rock.

FINAL SESSION, HOUSE OF DELEGATES
1:30 P. M.
APRIL 14, 1937

The meeting was called to order by President Fletcher. The following delegates or alternates answered roll call:

W. A. Moore, Benton; J. G. Gladden, Boone; Alvin Butt, Carroll; S. W. Douglas, Chicot; Ira W. Ellis, Craighead-Poinsett; S. D. Kirkland, Crawford; B. M. Stevenson, Crittenden; T. J. Stewart, Cross; E. E. Estes, Dallas; H. T. Smith, Desha; Thos. Douglass, Franklin; H. King Wade, Euclid M. Smith and W. T. Wootton, Garland; W. M. Majors, Greene; W. G. Hodges, Hot Spring; L. T. Evans, Independence; J. M. Lemons, Jefferson; E. D. McKnight, Monroe; L. L. Hubener, Mississippi; A. S. Buchanan, Nevada; J. S. Rinehart, Ouachita; B. H. Hawkins, Polk;

J. C. Gilliam, Prairie; H. Fay H. Jones, S. C. Fulmer, Hoyt R. Allen, Alan Cazort and Karl Rosenbaum, Pulaski; J. R. Loftis, Randolph; Dewell Gann, Sr., Saline; L. D. Duncan, Scott; J. W. Amis, H. Moulton, Sebastian; J. C. Graves, Sevier; J. O. Rush, St. Francis; L. L. Purifoy, Union; S. J. Allbright, White, and J. F. Hays, Woodruff.

By action of the House of Delegates the following members were seated as delegates from their respective county societies:

C. J. Steed, Clark; J. T. Matthews, Cleburne; Miles F. Kelly, Grant; W. H. Toland, Howard-Pike; A. M. Elton, Jackson; J. M. Kolb, Johnson; J. F. McKnight, Lafayette; L. J. Kosminsky, Miller; A. B. Tate, Pope-Yell, and Fount Richardson, Washington.

Other members of the House of Delegates in attendance were:

President Fletcher; Past-presidents E. F. Ellis, M. E. McCaskill and D. A. Rhinehart; Councilors C. W. Dixon, M. C. Hawkins, Jr., S. B. Hinkle, D. L. Owens, J. M. Proctor, H. A. Stroud and S. J. Wolfermann and Secretary Brooksher.

W. T. Wootton presented the report of the Nominating Committee:

President-Elect—S. J. Wolfermann, Fort Smith; A. S. Buchanan, Prescott; Dewell Gann, Sr., Benton.

First Vice-president—H. Fay H. Jones, Little Rock.

Second Vice-president—J. F. John, Eureka Springs.

Third Vice-president—L. C. McVay, Merion.

Treasurer—R. J. Calcote, Little Rock.

Secretary—W. R. Brooksher, Fort Smith.

Councilor, First District—H. A. Stroud, Jonesboro.

Councilor, Third District — T. J. Stewart, Wynne.

Councilor, Fifth District—R. B. Robins, Camden.

Councilor, Seventh District—Euclid M. Smith, Hot Springs National Park.

Councilor, Ninth District—D. L. Owens, Harrison.

Councilor, Tenth District — Clyde McNeil, Rogers.

Delegate to the American Medical Association —W. R. Brooksher, Fort Smith.

Alternate to the American Medical Association—Geo. B. Fletcher, Hot Springs National Park.

By motion the report of the Nominating Committee was received and the committee discharged with thanks.

By motion all officers with the exception of the President-Elect were elected by acclamation.

J. W. Amis, Clyde McNeil and Joe F. Shuffield were appointed tellers. The House of Delegates then voted by ballot upon the names of S. J. Wolfermann, A. S. Buchanan and Dewell Gann, Sr., for President-Elect, S. J. Wolfermann receiving a majority of one vote on the first ballot. On motion of A. S. Buchanan, the vote was made unanimous.

At this time, President O. J. T. Johnston was escorted to a seat on the rostrum by Past-presidents M. L. Norwood and M. E. McCaskill.

A. S. Buchanan then presented the report of the Reference Committee.

REPORT OF THE REFERENCE COMMITTEE

We, your Reference Committee, have given careful consideration to the written reports of the various committees submitted to us.

The report of the president, among other things, suggested that a committee be appointed to investigate the advisability of employing a secretary of the board of examiners to be stationed in the Capitol at Little Rock. We believe this recommendation to be correct, and suggest that the committee study the matter with the attorney of the Society, and make its report to the council, which shall have authority to put such a change into effect.

The other suggestions of the president were also timely and valuable, and we recommend a careful reading of his report.

We commend the program committee in preparing the scientific program for this convention. It was high class and well selected. We recommend that more state men be placed on the program and that their appearance on the program be alternated with the out-of-state men, in order that the state men may have better attention and a large audience.

We recommend and approve the very thorough and complete report of the Legislative Committee, and this being a legislative year they deesrve special commendation for the great amount of time which they were called upon to devote to our affairs.

The report of the committee on Health and Public Instruction read by Dr. W. B. Grayson, as chairman, was exhaustive and bears out the opinion which we have previously had, that the cooperation of the State Board of Health with organized medicine has been full and complete, and has resulted in a high degree of efficiency. Due largely to the watchful care of this board there has been no epidemic of any proportions during the past 12 months. The confidence which the United States Public Health service has for this board and its director, Dr. W. B. Grayson, and the contact which the director enjoys with federal officials has been of great financial benefit to our people.

We therefore, recommend the adoption of the following resolution:

Whereas, the best results in Public Health work can only be achieved after experience has been gained by the director, and

Whereas, Dr. W. B. Grayson has given studious, earnest, and wholesouled attention to his duties at all times during the past four years, and

Whereas, we believe that the state would be the loser should he be displaced. Now, Therefore;

Be it resolved by the House of Delegates of the Arkansas Medical Society that the services of Dr. Grayson be continued for the future, in his present capacity.

The report of the Committee on Medical Education and Hospitals was full and complete and we thank them for their diligent labor.

The report of the Public Relations Committee was timely and complete and we wish to thank them for their efforts.

The report of the Committee on Medical Economics showed careful study of this important topic, and will furnish a basis for further consideration. The council will hold a special meeting, in conjunction with the Medical Economics Committee, after reading the report of the American Medical Association to be made at its next annual meeting, when it is hoped a definite decision may be made.

We wish to commend the Committee on Scientific Exhibits for they have done a wonderful piece of work, and we believe that the exhibits are the best that we have had in the history of our association.

We want to thank the members of the Committee on Necrology for the presenting a most beautiful service and we regret to realize the passing of so many of our esteemed members.

The Committee on Cancer Control has started something new and worthwhile in the control of cancer and we hope the members of our profession will lend their wholehearted support to the activities of this committee.

We wish to thank the Entertainment and Ararangement Committee, and the Pulaski County Medical Society, for their untiring efforts to make this meeting one greatly to be enjoyed and long remembered. A large part of the success of the meeting has been due to their generosity and thoughtful hospitality.

We especially thank the Committee on Maternal and Child Welfare for their efforts in securing the services of Dr. Davis in conducting a series of lectures and demonstrations in various towns of the state and feel that much good will come from this work. We approve heartily the circuit plan as recommended by the Committee.

After a careful study of the report of the Post-Graduate Study Committee and the two high class programs they gave the State Society during the past year, we believe it advisable and recommend that the committee be thanked for the splendid work and suggest that this type of work be continued and hope more of the doctors of the state will attend these meetings, as much good can be had by so doing.

We are sorry that due to the illness of Dr. Don Smith there was no report by the Auxiliary Committee.

The Committee on Syphilis control are to be commended for their splendid work and we recommend that the suggestions made in their report be carried out and that the doctors of the state cooperate with them in their programs.

The report of the Council contained a summary of its activities, showing much study and work and careful attention to their duties by the several councilors. Great credit is due to the councilors for their efforts expended so freely for the benefit of organized medicine.

The secretary of the state medical examining board gave a complete report of the activities of the board for the past year, and we desire to commend the board for the splendid work which they are doing.

The report of the delegate to the American Medical Association was given in a beautiful address, stating the work was of great magnitude and in the interest of organized medicine, and we thank the delegate for his report.

The report of the fraternal delegate, Dr. Douglas, was made orally, and he brought us valuable information from our sister Society, that of the state of Mississippi.

The report of our attorney was in the form of a compilation of laws affecting doctors. This will be published and a copy furnished to each member by the Society. The work has been carefully done, and we compliment Mr. Deisch on its excellence.

Our study of the lien law in connection with his report, shows that doctors should be reasonable in their fees, when taking advantage of the lien law. We advise that doctors be guarded in the fees which they charge for the reason that there is a growing sentiment that some of them are taking undue advantage and charging fees not commensurate with the work done.

Forms are included in the book which will make it convenient for those who desire to make use of the lien law, and we consider this a valuable feature of the book.

The report of the Treasurer shows a balance having been accumulated during the past year, after paying all expenses of the Society. We desire to thank the Treasurer for his continued and careful attention to the affairs of the Society.

The report of the Secretary indicates progress in membership, and increased interest by the component Socities. The continued advance of the Society depends on the diligence of the local secretaries, who have done splendid work during the past year. The Journal is being improved due largely to the response of its readers to the advertisers. We urge the careful consideration of this report as it points out the way to a better future for the Society.

After a study of the resolution submitted by the Sebastian County Medical Society concerning the advisability of furnishing the family with a copy of the birth certificate of each new born of the family, we concur in this resolution and suggest that it be done. We also concur in the resolution by Sebastian County Medical Society that the children be immunized against diphtheria before admission to public school.

The Committee on Commercial Exhibits, of which Dr. George F. Jackson was chairman, has, as usual, done a great deal of work. It goes far to make our meetings a success. They have our wholehearted appreciation.

Respectfully submitted,

A. S. BUCHANAN,
JOE F. SHUFFIELD,
J. B. CATHEY.

By motion the report of the Reference Committee was adopted.

D. L. Owens, Secretary, presented the report of the Council

REPORT OF THE COUNCIL

D. L. OWENS, Secretary

April 12, 1937

Appointed auditing committee. Made nominations for honorary membership. J. M. Lemons presented the chairman with a gavel. Allowed the usual honorarium for the secretary-editor and attorney. Authorized Pres-

ident, Chairman of the Council and the Secretary to make arrangements for continuance of legal counsel. Appointed committee to purchase a suitable memento for Val Parmley, as an expression of the appreciation the Society has for his services as chairman of the committee on medical legislation.

April 13, 1937

Approved the redistricting of councilor districts as scheduled except that Madison county is to remain in the tenth district. E. E. Barlow presented a watch to Val Parmley as a token of appreciation for faithful services performed as chairman of the legislative committee. Val Parmley responded stating that he was always at the service of the Society. Discussed the resettlement administration medical service and by motion decided that each councilor should study the matter of contract practice within his district and that a special session of the council would be called for further discussion of this and related matters with the committee on medical economics in the near future. Expressed appreciation for the gavel presented by J. M. Lemons and ordered secretary to secure a plate for this gavel.

April 14, 1937

Extended vote of thanks to F. A. Corn, Jr., for unselfish service in the matter of councilor district changes. Discussed medical and hospital care of the indigent as contemplated and provided for the appointment of a committee to study this matter. Authorized the secretary to take such action in the courts as is expedient to protect the basic science law. Heard announcement of supply of biologicals to the physicians of the state for the indigent by the state Board of Health. Received report of Geo. F. Jackson, council representative on commercial exhibits and thanked Dr. Jackson for his efforts. Authorized Dr. Jackson to turn proceeds over to the Pulaski County Medical Society and further recommend to the new council that Dr. Jackson be continued in office. Appointed committee to study the constitution recommending any desirable changes. Adopted resolution providing that effective in 1938 members can be considered for subsequent nomination as honorary members provided their annual assessments have been paid each year within the constitutional prescribed period. Received and adopted report of auditing committee. Adopted resolution opposing transfer of U. S. Public Health Service to any public welfare department of the federal government.

By motion the report of the Council was adopted.

Invitations for the 1938 annual session were extended by L. J. Kosminsky for Texarkana and A. S. Buchanan for Prescott. A. S. Buchanan withdrew the invitation from Prescott and the invitation of Texarkana was unanimously accepted.

The secretary then presented the names of the following members nominated for honorary membership in the Society by the Council:

J. S. Kolb, Clarksville.
A. C. Thiolliere, North Little Rock.
W. G. Allison, Hope.
Don Smith, Hope.
Frank Nisbett, Brookland.
R. W. Ratliff, Jonesboro.
W. C. Haltom, Jonesboro.
J. S. Westerfield, Conway.
J. F. McKnight, Bradley.
F. E. Baker, Stamps.
F. W. Youmans, Lewisville.
H. G. Burge, Nettleton.
E. T. Bramlitt, Malvern.
W. R. Hunt, Clarksville (posthumous).

By motion these members were elected honorary members of the Society.

The following nominations for selection by the Governor to fill expiring terms on the State Medical Board of the Arkansas Medical Society were then approved by motion:

Second Congressional District—L. T. Evans, Batesville; J. T. Matthews, Heber Springs; T. C. Guthrie, Smithville.

Third Congressional District—Fount Richardson, Fayetteville; D. L. Owens, Harrison; Clyde McNeil, Rogers.

Sixth Congressional District—J. M. Proctor, Hot Springs National Park; E. A. Callahan, Carlisle; C. W. Dixon, Gould.

Seventh Congressional District—D. E. White, El Dorado; R. B. Robins, Camden; E. E. Barlow, Dermott.

The House of Delegates expressed appreciation for the courtesies extended by the Pulaski County Medical Society, the Marion Hotel, the press of Little Rock, the Governor of Arkansas, the distinguished guests of the Society and the citizens of the City of Little Rock by an unanimously adopted motion.

The House of Delegates then adjourned.

FINAL GENERAL SESSION
APRIL 14, 1937

The meeting was called to order by President Fletcher. The following Past-presidents came to the rostrum and were introduced by H. Moulton: W. T. Wootton, E. E. Barlow, D. A. Rhinehart, F. O. Mahony, L. J. Kosminsky, J. M. Lemons and H. Moulton.

President Fletcher then presented the gavel of the Society to President Johnston who accepted the office of President of the Society for 1937-38. President-Elect Wolfermann was then escorted to the rostrum and expressed his appreciation for the honor conferred upon him.

The meeting then adjourned sine die.

RANDOM THOUGHTS OF THE SECRETARY

April 14th. A most successful annual session completed, with gratitude to our many hosts and to all who contributed to the success of the meeting, we turn homeward relieved in great measure of the mass of detail with which our life has been crowded for the past three days. With all the duties of a secretary, we still insist that it is not incumbent upon him to act as host to a conference between Chuck Evans and Sid Wolfermann to four A. M., the necessity of appearing with bright and rosy countenance at a 7:00 o'clock breakfast overshadowing it all.

April 15th. Learning that Geo. Jackson's capture of an auto prowler was but a temporary, palliative measure, while Joe Shuffield's treatment was complete immobilization, we wonder if George will have to give up his police shield. And, will Hoyt Allen now take up boxing to keep his shield? We note that F. P. Hardy makes the contributor's column in a certain weekly magazine sponsored by a physical culturist, and now engaged in a tirade upon medical men.

April 19th. For an all-encompassing specialty, taking the patient at all stages of existence, give us roentgenology. Not content with emphasizing the value of the roentgen-ray in obstetrics, its pre-natal field, we make a post-mortem study for the coroner.

April 21st. With the College of Physicians in Saint Louis, interested in an x-ray which looks around corners, but prosperity is apparently non-opaque and not demonstrable. A large attendance in which we find friends but no Arkansas colleagues. Astounded to find a widely-heralded sleep-inducing drink, of alleged Helvetian origin, occupying a prominent exhibit space. Mayhap the college has not heard of the Council on Chemistry of the American Medical Association.

April 23rd. This day hearing an informative talk on archery but more provoking of thought was the news that Chas. Holt and Weddington had taken up the sport. We just cannot visualize them as Robin Hoods or Indian braves.

April 24th. The gi patient, griping at the enforced fasting incumbent upon the examination, offers gratuitous advice to the Tennessee mountaineer: "if no word from the Lord, listen to the devil."

April 27th. Our asserted claim that Bill Riley would reach adolescence with tonsils intact becomes another trampled idea. Moulton deftly relieves the son of these while we become another of those fathers standing around and muchly in the way. Reacting well, the youngster expresses a desire to view the specimens, a desire born less of scientific interest, we find, but rather of a primitive urge for reprisal.

April 28th. Through this day gladdened that the operation is now one that we can talk about but decidedly of the opinion that the postoperative condition of the patient offers a field for unlimited research in alleviation of symptoms.

May 3rd. Meeting with the Basic Science Board who express a pleasure that the Society has finally taken an interest in their activities, the board being the child of the Society, but an obviously neglected offspring. Discussing many matters and impressed with the earnestness of these men in providing only qualified practitioners of the healing arts in Arkansas.

May 6th. With the aid of motion pictures we discuss the evacuation of the wounded before the reserve officers chapter, a serious-minded gathering, intent upon improving their military knowledge.

AUXILIARY NEWS

MRS. H. E. MURRY
Publicity Chairman

MRS. CURTIS WHITTEMORE JONES
Benton

President, Woman's Auxiliary to the Arkansas Medical Society, 1937-38

MRS CURTIS W. JONES

Mrs. Curtis Whittemore Jones of Benton, President of the Woman's Auxiliary to the Arkansas State Medical Society, assumed office April 13th, 1937, during the annual convention which was held April 12-13-14, 1937, in Little Rock. She succeeded Mrs. J. T. McLain, of Gurdon, who presided at the convention sessions.

Mrs. Jones was a charter member and first secretary of the Saline County Auxiliary, organized in 1926. She also has been president and is now serving as secretary-treasurer.

State offices which she has held include chairman of Student Loan Fund, 1929-30; publicity secretary, 1930-31; finance chairman, 1934-35; chairman health and education, 1935-36; president-elect, 1936-37.

Mrs. Jones is the second Benton woman to be elected to the presidency, Mrs. Dewell Gann, Sr., was the first elected president, 1926-27.

In addition to her work with the Medical Auxiliary, Mrs. Jones has been active in the Woman's Missionary Society and now is serving for a second term as chairman of the Zella Bell Circle, First Methodist Church. She is a member of the Tuesday Club and recently was appointed chairman of the Grey Ladies unit, American Red Cross.

Mrs. Jones is a native of Kentucky and studied at Transylvania College at Lexington. The family moved to Little Rock, where she met Dr. Jones. She and Dr. Jones have lived in Benton for the past 14 years.

Dear Auxiliary Members:

"Believe it or not," your thirteenth president was installed in office on the thirteenth day of the month, beginning the thirteenth Auxiliary year.

And now, in the beginning, to forestall any superstition some of you might have, it seems fitting that we resolve to make this a "lucky thirteen" year for the Auxiliary. To do this will require a little added effort on the part of each of us, namely: Give Committee Chairmen your entire support and cooperation; present a well-rounded Health Education program; promote the Auxiliary in counties still unorganized; sell Hygeia, this is our greatest means of health education for Auxiliary members and the public; answer all correspondence at once, use postal cards, most information required can be put into small space.

Following is a complete list of Committee Chairmen. File this for future reference.

Organization—Mrs. C. E. Kitchens, DeQueen.

Health Education—Mrs. O. J. T. Johnson, Batesville.

Public Relations—Mrs. S. J. Wolfermann, Fort Smith.

Hygeia—Mrs. S. C. Fulmer, Little Rock.

Constitution and By-Laws—Mrs. S. A. Collom, Texarkana.

Memorial—Mrs. H. King Wade, Hot Springs.

Finance—Mrs. T. B. Buffington, Benton.

Exhibits—Mrs. J. C. Cunningham, Little Rock.

Physical Health Examinations—Mrs. Pierre Redman, Fort Smith.

Archives—Mrs. K. W. Cosgrove, Little Rock.

Mrs. Curtis W. Jones, President.

New officers of the Auxiliary to the Arkansas Medical Society were introduced at the large luncheon given April 12th, at Concordia Club with the Auxiliary to the Pulaski County Medical Society the host group. Mrs. Bryce Cummins, president-elect of the Pulaski County Auxiliary, presided and presented Miss Erle Chambers, executive secretary of the Arkansas Tuberculosis Association, as guest speaker. Miss Chambers discussed "The Early Diagnosis Campaign." Mrs. George B. Fletcher of Hot Springs sang "Lullaby" by Cyril Scott and "Your Heart' by Guy d'Hardelot, and Mrs. W. E. Beckhart, violinist, played "Gypsy Dance" by Nache. They were accompanied by Mrs. A. F. Pirnique. Mrs. J. Palmer Sheppard gave the invocation. Officers presented at the luncheon were Mrs. J. B. Crawford of El Dorado, president-elect of the Auxiliary; Mrs. Curtis Jones of Benton, new president; Mrs. C. E. Kitchens of DeQueen, first vice-president; Mrs. O. J. T. Johnston of Batesville, second vice-president; Mrs. S. J. Wolfermann of Fort Smith, third vice-president; Mrs. S. C. Fulmer of Little Rock, fourth vice-president; Mrs. Loyce Hathcock of Fayetteville, parliamentarian; Mrs. W. E. Gray, Jr., of Hot Springs, treasurer; Mrs. H. E. Murry of Texarkana, publicity chairman; Mrs. C. W. Garrison of Little Rock, historian; Mrs. Charles E. Oates of Little Rock, chairman of student loan fund; Mrs. S. A. Collom of Texarkana, chairman of constitution and by-laws; Mrs. H. King Wade of Hot Springs, memorial chairman; Mrs. T. E. Buffington of Benton, finance chairman; Mrs. J. C. Cunningham of Little Rock, exhibits; Mrs. K. W. Cosgrove of Little Rock, archives chairman. The luncheon was served buffet style from a large table beautiful with iris, roses and snapdragons. The same flowers were used on the luncheon tables, which held covers for over one hundred.

On April 6th, at Clarendon the Auxiliary to the Third District Medical Society was organized. Mrs. T. G. Porter of Hazen, gave a very interesting talk on the history and purpose of the auxiliary. After this talk the women present decided to organize. The following officers were elected:

President—Mrs. E. D. McKnight, Brinkley.

Vice-president—Mrs. Gilbrech, Clarendon.

Secretary—Mrs. J. H. West, McCrary.

Treasurer—Mrs. E. A. Callahan, Carlisle.

Publicity secretary—Mrs. Thos. Wilson, Wynne.

Historian—Mrs. T. G. Porter, Hazen.

Five counties of the district were represented at the meeting. It was decided that the auxiliary would meet semi-annually at the place and time of the meeting of the Third District Medical Society. The next meeting will be in Brinkley in October.

Mrs. Thomas Wilson, Publicity Secrtary.

Tribute was paid to the late Dr. J. D. Southard by the Auxiliary to the Sebastian County Medical Society May 10, 1937, meeting at the home of the president, Mrs. S. J. Wolfermann. Dr. Southard was the father-in-law of the president-elect of the auxiliary, Mrs. J. S. Southard. He died May 9, 1937.

A short business session was held. The installation of officers was postponed until a later date.

MRS. W. F. ROSE, Publicity Chairman.

Mrs. J. T. Robison delighted a large audience Friday, April 23rd, in the club room when she reviewed "An American Doctor's Oddessy" by Victor Heiser, M. D., for members of the Woman's Auxiliary to the Bowie-Miller Counties Medical Society and their invited guests, the heads of the PTA groups, garden clubs, and representatives of the Women's Church Federation.

Receiving with the president, Mrs. Albert Mann, were Mrs. N. B. Daniel, incoming president; Mrs. L. J. Kosminsky, Mrs. Allen Collom, Jr., and Mrs. J. F. Williams.

Roses in a variety of shades were used about the club room, and preceding the review, Mrs. W. Earl Haydon, accompanied by Mrs. T. A. Bain, sang two lovely numbers.

Mrs. Robison gave a splendid criticism, which she developed from the viewpoints of humor, travel, adventure, health, and story, and concluded by quoting several passages that were particularly appealing in their development of a lesson.

During a brief social period, Mrs. E. L. Beck presided at the punch bowl and was assisted in serving by Mrs. Reavis Pickett, and Mrs. Mann. Among the out-of-town guests were Mrs. R. H. T. Mann of Charleston, Mo., and Mrs. P. H. Phillips, of Ashdown, Arkansas.

Mrs. H. E. Murry, Publicity Chairman.

COMING MEDICAL MEETINGS.

American Medical Association, Atlantic City, June 7-11, 1937.

American Association for the Study of Goiter, Detroit, June 14-16, 1937.

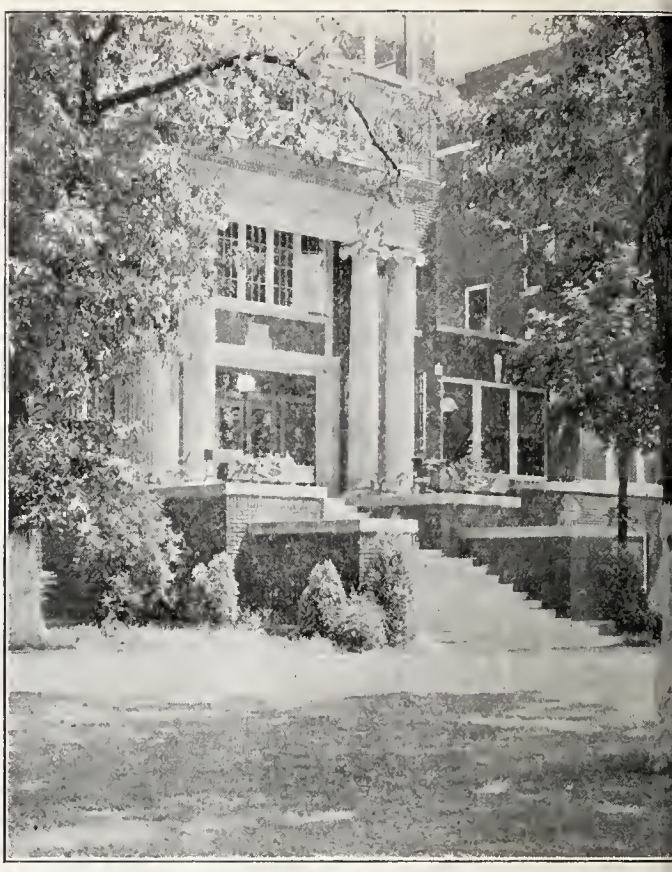
Southern Medical Association, New Orleans, November 30-December 3, 1937.

BOOK REVIEWS

Why We Do It. By Edward C. Mason, M. D., Ph.D., F. A. C. P., Professor of Physiology, University of Oklahoma School of Medicine, Oklahoma City. Pp. 177. Price, $1.50. Saint Louis: C. V. Mosby Company, 1937.

Dr. Mason gives in simple form a discussion of human conduct and related physiology. The common sense point of view taken by the author is refreshing and one must consider the subject well handled when "the amount of ground covered and not the depth to which the ground has been cultivated," is considered as the author suggests. "Psychology," the author states, "has surrendered its soul to theology, has lost its mind to metaphysics, has been knocked unconscious by science, and has now come to physiology to interpret its behavior." The volume is intended for parents and teachers and as such fulfills well its mission.

The Diseases of Infants and Children. By J. P. Crozer Griffith, M. D., Ph.D., Emeritus Professor of Pediatrics in the University of Pennsylvania; Consulting Physician to the Children's Hospital, Philadelphia; Consulting Physician to St. Christopher's Hospital for Children; Consulting Pediatrist to the Woman's, the Jewish, and the Misericordia Hospitals, etc.; Corresponding Member of the Societe de Pediatrie de Paris; and A. Graeme Mitchell, M. D., B. K. Rachford Professor of Pediatrics, College of Medicine,



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WHAT THE PRACTITIONER SHOULD KNOW ABOUT UROLOGY*.

J. HOY SANFORD, M. D.
Saint Louis

Every practitioner has sufficient knowledge of the various specialties to recognize symptoms demanding individualized attention. Likewise, the specialist makes an effort to obtain a general knowledge of medicine which is equally as important for him to successfully practice his chosen specialty. Thus the practitioner and the specialist are striving for the same goal, that is, early recognition of symptomatology foreign to their chosen field. Acquisition of this knowledge to a balanced degree is conducive to success whereas too much or too little knowledge is ofttimes a serious handicap. Practicing a specialty makes me appreciative of the difficulties encountered by the practitioner in dealing with a varied type of medical and surgical cases. The specialist does not expect the reference of all cases manifesting symptoms common to his specialty as this is not only impossible but unnecessary. Prompt recognition, however, of signs and symptoms requiring special technic and training to firmly establish a diagnosis and institute corrective medical, therapeutic or surgical intervention is of great importance. For that reason, I elected to discuss some of the urologic problems that every practitioner should be more or less familiar with and while some of the discussion may seem primary, I can assure you it is of great importance.

The use and abuse of some of the diagnositic and therapeutic agents in urology will be touched upon with a hope that a clearer understanding of their indications and limitations will be impressed upon you. A topic as diversified and broad in its significance as the one I selected must, by necessity, be very rambling, so I must ask your indulgence in my effort to give you some practical hints that I hope will serve you in your daily practice.

I would like to mention some of the essential data necessary for compilation in examining a case presenting urological symptoms. Needless to say that a complete and detailed history is of great significance and in many cases a tentative diagnosis can be made at once from the history, and in most instances, verified by subsequent study. For example, repeated renal colics, with or without gross blood, immediately suggests renal or ureteral calculus, ptosis with or without ureteral kink, or stricture of the ureter. This suspicion must, of course, to be confirmed or disproved by further study. Inspection of the abdomen for any mass, tenderness or muscle guard is important. The occasional difficulty in determining the true origin of a mass due to close proximity of other organs must be kept in mind and in some cases is most deceiving. I have seen a large spleen resulting from leukemia impossible to differentiate from kidney without the aid of a blood count or pyelographic study. Hence the importance of a complete blood as a routine in all urologic cases. Reflected pain is often times very deceiving and in many cases most perplexing. Localized tenderness and muscle guard are the most trustworthy signs. Obscure abdominal pain is the one condition requiring careful study to avoid misdirected surgery. I have seen tabetic crises have abdominal exploration in an effort to account for severe pain in the region of the gall bladder and stomach, hence the importance of routine Wassermann, Kahn or Kline, alone, or in combination and careful study of pupillary, patella and other reflexes. Examination of the spinal blood may be indicated. Examination of the external genitalia for the size, consistency and position of both cords, testes and epididymi is important. Tumor, tuberculosis and lues may be suspected and undescended testicle with associated hernia located. A mass in the abdomen occasionally may be found secondary to a teratoma of the testicle. This of course demon-

* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 14, 1937.

strates the importance of examining the external genitalia closely. A small pin-point urethral meatus may easily account for persistent urinary symptoms and stricture of the urethra must not be forgotten. There are many other conditions that might be mentioned but time does not allow, so I will stress the necessity and importance of careful and minute inspection of the external genitalia.

Examination of the prostate is the next step and is most essential. The rectal sphincter tone must be checked when examining the prostate and the size, consistency and tenderness of the prostate noted. The expressed secretion from the gland must be microscopically studied to rule out infection on account of the prostate being classified as one of the focal points of infection. A general physical examination of a patient should always include the prostate. Many local and systemic symptoms can be traced directly to the prostate. When examining the prostate for focal infection if the first examination is negative for pus, insist on a second examination in a few days as sometimes the first secretion may be negative and a second may prove positive. This is accounted for by a so-called latent pent-up infection that is not draining and the first massage will establish drainage by encouraging circulation and tone and releasing scarred and infiltrated areas. If infection is not present the second examination will be negative the same as the first. The infected prostate manifests itself in various ways in different individuals. Some have local and no systemic signs, others have systemic and no local signs, and a few have both. I am unable to explain this phenomenon. Backache frequently occurs from a prostate that is infected. Hypertrophy of the prostate, carcinoma and prostatic calculi can be detected by palpation. It is important when the prostate is firm and hard to differentiate between inflammation, carcinoma and calculi. Xray will rule out calculi and further observation and treatment will determine between infection and carcinoma.

Last, but not least, is urinalysis in our preliminary study of the patient. Careful study of the urine in definite or suspected urinary tract disease is extremely important. As a gentle reminder do not forget that a negative urine does not rule out the urinary tract from pathologic findings. This is important as it is not generally understood. Diluted urine specimens are not nearly as accurate as concentrated specimens, especially for microscopic study. A catheterized specimen in the female is superior to a voided specimen. In my practice I insist upon a catheterized specimen before giving an opinion. Cultural study of the urine in the presence of long standing or intermittent infection is important as the urine may be negative microscopically but positive under culture. I am convinced that we see low grade intermittent kidney infections that come and go and in these patients microscopic study of the urine is not as accurate as cultural study. Gross blood in the urine demands immediate study. We all know that sometimes gross blood in the urine will spontaneously disappear and that is why internal medication is given credit for this improvement when in reality it has nothing to do with it. In my opinion it is a grave injustice to treat any patient with medication when gross bleeding is present and is a definite reflection on the physician. Immediate cystoscopic study of the patient while bleeding is present will in the majority of cases establish the origin of the bleeding. Some of the most serious renal and bladder lesions may bleed for a few days and go months or years before recurring. Just look what might have been done for those patients by early diagnostic study. An innocent tumor of the bladder such as papilloma might have been destroyed promptly if the patient had been seen early, whereas, we know definitely that all of the papil lomatous tumors are potentially malignant and when left untreated over a period of time assume malignant changes. There are many causes for bleeding but always carry these three in your mind as they are by far the most common and certainly the most serious, namely: tumor, tuberculosis and stone. Your patient will appreciate you all the more if you tell him the importance of early diagnostic study and refuse to give him medication explaining the three possibilities mentioned above and impress on him that your responsibility ceases the minute you recommend early intensive specialized study of his case. If one could see the well advanced renal and bladder tumors or the tuberculous kidney with intractable cystitis or the renal stone with complete destruction of the kidney and in most instances trace their present deplorable condition to the physician, it really seems not only inexcusable but criminal. I have often wondered what makes the doctor hesitate to refer these unfortunate people to the specialist for study. Is it ignorance of the many serious pathological possibilities that may be present, or is it timidity on his part, harboring the idea the patient may think he is not qualified when he insists on re-

ferring the case to another doctor, or lastly is it monetary? I hate to even think of the last named and will refuse to, so that leaves ignorance and timidity and I believe they constitute the majority. Certainly somewhere close to everyone of you are men qualified to assist you in the early diagnostic study of these cases so why not adopt the rule of no medication until a diagnosis has been definitely established? In doing this you are protecting your patient from possible serious damage of a vital organ and have served him in a conscientious and intelligent manner. Microscopic pus, blood or bacteria alone or in combination indicates trouble somewhere along the urinary tract. Microscopic blood is equally important to account for as gross bleeding though less impressive. Early tuberculosis, calculus pyelonephritis, tumor, nephritis and various other lesions may account for it.

After the urine study, blood pressure findings should be recorded as cardio-vascular-renal disease may be present. Xray of the urinary tract is indicated if gross or microscopic blood is present or if any mass in either flank is detected or for any other reason, such as unexplained pains in the back. Arthritis of the spine, which occasionally simulates kidney, in so far as pain is concerned, is easily detected. One can readily see that the information derived from this type of examination will justify a diagnosis sufficiently established to satisfy you or warrant further and more exhaustive study with the instruments of diagnostic study, namely: cystoscope, cystourethroscope, ureteral cathetor, separate kidney functional test, pyelographic studies (retrograde or intra-venous), etc. May I mention just a few of the many important urologic manifestations and some of the therapeutic and diagnostic agents that every practitioner should know something about?

In obscure abdominal pain the urinary tract must be given careful consideration. Infected urine or red blood cells in the urine call attention to its possible involvement but normal urine suggests to many its complete elimination. This is not true as ptosis, ureteral angulation, stricture of the ureter, intermittent hydronephrosis and aberrant vessels will create considerable pain and constitute a fair percentage of urinary tract disturbances. The urine may be perfectly normal in these cases. In order to avoid exploratory laparotomy or misdirected surgery, urologic study must be given to a patient having obscure abdominal pain where the gall bladder and gastrointestinal study has been negative. In the study of this type of case as in many others, pyelographic interpretation is necessary. Retrograde and intra-venous pyelography are the two methods used with individual selectivity left to the judgment of the operator. In my opinion, intra-venous urography is a valuable adjunct to our diagnostic armamentarium, but its general use is certain to disappoint as accurate surgical data is uncertain in some cases and must be supported by further instrumental study and retrograde pyelography. The general use of intravenous pyelography should be limited to recognition of the hydronephrotic kidney, interpretation of doubtful ureteral shadows and the demonstration of a normal pelvis. Where any surgery is contemplated intra-venous urography should have further supportive evidence as I do not think it is entirely reliable in its estimate of kidney function. Intra-venous urography in most instances has been found most useful in the following conditions: In ruling out kidney in a differential diagnostic case by showing normal kidney outline and function, identification of doubtful shadows in region of upper urinary tract, in senile patients and in patients that do not tolerate instrumental manipulation, in proving or disproving stasis especially hydronephrosis, and in the demonstration of renal and ureteral anomalies, in urethral pathology where instrumentation is contra-indicated and in patients in poor general condition, in infants and children and patients who previously reacted sharply to retrograde pyelography and in traumatic injuries to urinary tract. Occasionally intra-venous urography will disappoint you for no good reason and fail to give information of any value. What the practitioner should realize is that intra-venous urography has its limitations and as Dr. Bransford Lewis remarked, "Intra-venous urography is negative evidence when retrograde urography is positive evidence." The limitations of intra-venous urography are numerous and unless this is consistently kept in mind errors in diagnosis and treatment, both medical and surgical will be inevitable.

I will briefly discuss acute and chronic kidney infections as they are frequently seen and treated by the practitioner. The importance of early ureter catheterization in an acute fulminating type of kidney infection cannot be emphasized too strongly. Prompt drainage of this type of case per ureter catheter often prevents extreme toxemia and even blood stream involvement. A retention ureter catheter insures prompt drainage, releases back pressure and often times pro-

tects the kidney from abscessed areas and possible rupture through the capsule into peri-nephritic space. Persistent recurrent attacks of pyelitis demands most careful study to rule out any obstructive lesions, congenital abnormalities and the correction of intestinal stasis and any pathology about the colon. Focal infection must be searched for and the patient's diet, habits, mode of living, etc., carefully gone into. Pyelitis of pregnancy is best handled by ureter catheterization and I have seen very few cases aborted by instrumental manipulation if done quickly and gently. Intra-venous use of uritone is very effective in acutely ill patients and in pregnancy. In chronic pyelitis the same careful search for foci of infection and intestinal disorders must be carried out and Xray of the urinary tract in both the acute and chronic case of pyelitis is necessary as occasionally a stone, silent in character, may play an important part. This is especially true in the low grade chronic type. Congenital malformations must be borne in mind. The impression I would like to leave is that kidney infections, acute and chronic, deserve more than fluids and urinary antiseptics in the majority of cases.

I would like to bring out a few important points about cystitis which is so frequently seen by the general practitioner. Cystitis must be associated with infection in the urine and it may be primary or secondary. A great majority of cases of cystitis are secondary to kidney infection. Primary cystitis of the most painful type associated with violent tenesmus will scarcely give any temperature but when secondary to a kidney infection systemic reaction is more or less present either to a mild or a severe degree. A grave injustice can be done a patient with cystitis by long continued medication either locally or by mouth when the condition fails to respond promptly as this invariably indicates the cystitis is secondary and not primary. A good rule to follow is that if a bladder does not respond promptly to internal medication and local instillations, further cystoscopic study and ureteral catheterization is indicated. A serious mechanical pathologic condition can be overlooked and a great deal of suffering, expense and time lost by the patient when eventual investigation will disclose an infected kidney or possibly stasis from an obstructive lesion along the urinary tract.

I shall briefly speak about urinary antiseptics as long as we are on the subject of cystitis. There are many urinary antiseptics on the market and most of them of little value. Urotropin and acid sodium phosphate and the new preparation mandelic acid are superior to most all the others. The indiscriminate and universal use of mandelic acid is a mistake. Its greatest efficiency is in bacilluria and if given in the face of an obstructive lesion any where along the urinary tract it may be helpful but certainly not as advantageous as removal of the obstruction. Mandelic acid should be given in the following manner if you expect to obtain any successful benefit: 1. The amount of fluid injected in 24 hours must be limited to 1200 ccs. or less. "The Ph of the urine must be observed daily and maintained at a level of 5.5 or less. It is seldom necessary to continue the therapy longer than from 12 to 14 days because if it doesn't do any good in that length of time, further investigation is necessary. It is a peculiar drug in that it will clear up some cases promptly but the urine will again show trouble shortly after its discontinuance. This does not happen in every case but certainly should be borne in mind when in use. I think it should be given cautiously as it creates some renal irritation in some people when its use should be immediately discontinued. It would appear that the oral administration of mandelic acid is followed by elimination of bacillary infections in the urinary tract in a large percentage of uncomplicated cases. In renal insufficiency its use is contra-indicated. The impression I want to leave with you is that it is a valuable adjunct in some cases but should not be given indiscriminately.

Frequent urination with or without pain and with normal urine is another condition that is indiscriminately treated by the practitioner. If such a case does not respond promptly to a little internal medication or local instillations, immediate cystoscopic study is necessary as not infrequently mechanical pressure on the bladder, early carcinoma, urethral pathology such as caruncle, contracture of the urethra, stricture of the urethra, involvement of the glands of the urethra or granulomatous urethra may be present and require treatment directed to cure the condition present. Hunner ulcer of the bladder is another condition that requires careful cystoscopic study and will not respond to any medication or local instillations. The impression I want to leave with you is that it is this type of case that demands much closer study than is usually recommended.

Hypertrophy of the prostate gland is frequently seen by the practitioner and in many

instances is treated by local and internal medication when a definite mechanical obstruction is present and the removal of this obstruction either by enucleation of the gland or trans-urethral resection is essential for a cure. Any patient seen in the prostatic age with symptoms pointing to obstruction should be referred for cystoscopic study immediately as medication is worthless. Time does not allow to go into detail about the various types of prostatic obstruction and surgical measures indicated but I must insist that this type of case be referred to the man doing special work as we are now in a position to offer various surgical measures for the relief of prostatic obstruction, these measures to be used in selected individualized cases, each case requiring sound judgment as to the type of surgery best suited to release the obstruction.

A point I would like to make clear about prostatic obstruction is this: Some of the smaller obstructions such as contracture of the vesical neck, median bar and moderate median lobe involvement will give the same clinical symptoms as the larger lateral lobe involvement. The first mentioned are better suited for trans-urethral surgery than the last, at least this is true in the hands of the average urologist. That is why the majority of practitioners think because one case was so easily restored to normalcy by trans-urethral methods he cannot understand why another was not as successful. The type of obstruction and the amount of tissue necessary for removal makes an enormous difference. I am not here to advocate any particular method of surgery to correct prostatic obstruction as I think it is an individual problem and I say do the one you can do best.

I should like to call attention to the advancement made in urology in infants and children. The pathological lesions found in infants and children are practically identical to those found in the adult and the careful study of these little ones can be done as effectively as in the adult and in the majority of cases with less reaction. There is no excuse for allowing a child to go on with a persistent pyelitis as they are extremely responsive to direct application of the kidneys through ureter catheterization and furthermore congenital abnormalities can be ruled out or diagnosed promptly and surgical measures instituted if necessary. Any child who has persistent or intermittent pus in the urine with or without fever deserves complete investigation of the urinary tract because in the majority of these cases a congenital abnormality of some kind is present and if promptly diagnosed may save the total destruction of a vital organ.

In closing allow me to express my gratitude for the privelege of discussing these urological problems with you in a common sense manner. If I have convinced you of the importance of careful diagnostic study in lesions of the urinary tract, especially in the presence of pus and blood in the urine, I will feel repaid for my intrusion upon your patience.

RESOLUTION

The membership of the Monroe County Medical Society deeply deplore the passing of one of our beloved members.

Doctor P. E. Terry had been affiliated with the society for many years. He was a hard, conscientious worker and was strictly ethical in all his life.

To the bereaved ones we extend sincere sympathy.

W. L. BOSWELL,
F. S. DOZIER,
Committee.

RURAL REHABILITATION MEDICAL SERVICE

The Ouachita County Medical Society being a unit of the Arkansas Medical Society desires to report to the Journal of the Arkansas Medical Society the attitude of the Society in regard to Rural Rehabilitation Medical Service.

The doctors in Ouachita County were approached by the Resettlement Administration and asked to care for their clients during the coming year for a certain sum of money which was considered inadequate. In other words, the doctors were asked to give an unlimited amount of service for a limited amount of money.

It was the consensus of opinion of the members of the Society that since the Resettlement Administration asked no other class of people to accept such a business proposition from them that it was unfair to ask doctors to accept such a plan. Mule dealers are paid their market price for mules, hardware dealers are paid market prices for plows, grocery men are paid market prices for groceries, etc. Why should the medical profession be discriminated against? Furthermore it is believed that this kind of a plan is just an entering wedge for State Medicine which the profession so bitterly opposes.

The members of the Ouachita County Medical Society have declined to accept the plan submitted by the Resettlement Administration but have agreed to care for their clients on a regular fee basis. The clients of this government agency are allowed individual quotas for medical service which may be exhausted in certain individual cases. When the latter occurs it is recommended that an emergency be declared to exist and that further appropriation be given the family for medical care.

It is believed that counties which have accepted the plan of the Resettlement Administration have not given the matter proper consideration and it is believed that the Council of the Arkansas Medical Society should consider this matter and take steps to prevent any further spread of this movement towards State Medicine.

LATERAL SINUS THROMBOPHLEBITIS: A CLINICAL STUDY*

H. W. LYMAN, M. D.†
Saint Louis

Infection of the bloodstream, as a result of otitis media and mastoiditis, may be more often recognized if the fact is kept in mind that the infectious process may extend in two ways: First, by contiguity, as in the so-called coalescent mastoiditis; and, second, by infective thrombosis of the small veins extending from the region of the tympanic cavity and mastoid antrum, as found in hemorrhagic mastoiditis.

In the first class the infection extends from the antrum, or tympanic cavity into the adjacent cells. The mucous membrane becomes so swollen and edematous that the nutrient vessels of the bone are obstructed and necrosis of the cell walls occurs. The process gradually extends through succeeding series of cells until the entire bony structure of the mastoid may be involved, and the lateral sinus exposed by this necrotic process, bathed in the pus of the perisinus abscess, and the sinus wall covered with a protective barrier of granulation tissue. If the mastoid is operated on before this protective barrier fails in its purpose, and the infected cells are exenterated, the case usually heals as a simple mastoiditis even though the sinus wall may be thick and rigid and bear no resemblance to its normal condition. If, however, the pressure of the confined pus is not relieved, the infection overcomes this barrier and invades the sinus wall itself. The pressure of the abscess slows the bloodstream, and, as soon as the intima becomes roughened by the inflammatory reaction, a clot begins to form within the sinus. This clot, at first mural, soon fills the entire lumen of the vessel. It is Nature's effort to isolate the infected focus within the vessel, and, as the infection spreads, fresh clot is formed in both directions until it may extend to or even beyond the torcular, and to the subclavian or innominate vein. In the meantime the original portion of the clot may break down and pus fill the sinus in the region of the point at which the infection originally entered.

In the second type, the small veins in the region of the middle ear, or antrum, may become thrombosed and these thrombi become infected early in the disease; and, there is practically no obstruction to the extension of this process. The patient may have a positive bloodstream infection very early in the disease, before there has been any bone destruction discoverable by means of the X-ray, and even before the formation of any appreciable clot within the sinus. I believe that many of the differences of opinion regarding the diagnosis and treatment of Lateral Sinus Thrombophlebitis are due to the existence of these two radically different pathological processes.

DIAGNOSIS:

The clinical picture is essentially one of sepsis. The patient with an ear infection, usually acute, suddenly has a chill followed by a marked elevation of temperature, which promptly subsides. This is followed by succeeding chills at irregular intervals and a typical "spiked" temperature curve which usually reaches 104 and 105, although it may only rise to 101 or 102. The chill may not be a distinct rigor, but only a sensation of chilliness, discovered by a careful questioning of the patient. In children this symptom may be lacking. As a rule the leucocyte count is higher than in simple mastoiditis, and if a Schilling differential count is made, there is a "shift to the left." A low leucocyte count in sinus thrombosis is usually an unfavorable sign. The so-called feeling of well being, so often mentioned as characteristic of this disease, is only present in the beginning; as the sepsis persists, the patient becomes more listless and shows the so-called septic pallor. All other causes of a fluctuating temperature must at this time be excluded. I will mention only a few. Malaria, Typhoid, Miliary Tuberculosis, and Endocarditis have been mistaken for Sinus Thrombosis. Pneumonia, with an intermitting temperature, as seen not infrequently in children and sometimes in adults, can be recognized by a careful chest examination, or an X-ray plate of the chest, the latter often disclosing a central pneumonia three or four days before it can be detected by auscultation and percussion. Pyelitis can be recognized by a careful examination of the urine. A thorough search for other foci of infection should be made. As these cases are usually due to infection by hemolytic streptococci, reduction of the percentage of hemoglobin is an important diagnostic aid, as well as an indication of the seriousness of the patient's condition. Other causes having been excluded, the diagnosis of Sinus Thrombosis is justified. A positive blood culture, in addition to the above-mentioned symptoms, practically clinches the diag-

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* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 13, 1937.

nosis. However, a negative blood culture does not justify delay as these may remain negative until late in the disease, and, in many cases, a positive culture is never obtained. Edema over the mastoid emissary vein (Griesinger's sign) has been rarely present in our cases.

The search for a cordlike mass along the course of the internal jugular vein, due to thrombosis of that vessel, has proven of no value, because this phenomenon is usually due to inflamed lymphatics in the neck, and, if it should be due to a thrombosed jugular, it occurs far too late in the course of the disease to be of value to the patient or the physician. Choked disc is another symptom, which, if it does occur, appears too late to be of diagnostic value.

Papilledema, or choked disc, is a late phenomenon and is best explained as being due to increased intracranial pressure brought about by an extension of the thrombotic process into the veins of Galen. Consequently, it is seldom of aid in the early recognition of Sinus Thrombosis.

It should be borne in mind that the jugular bulb may become infected directly from an otitis media and the symptoms of sinus thrombosis and septicemia develop without mastoid involvement.

SPINAL MANOMETER TEST:

When Tobey and Ayer adapted the Quakenstedt Test to the detection of an obstructed lateral sinus, they gave us a most valuable and important aid in dealing with this problem. This test, as you know, is based upon the fact that if both jugular veins in a normal individual are compressed there will ensue a rapid increase in intracranial pressure, as shown by the rise of the spinal fluid in the manometer tube, while if only one side is obstructed, there will be little or no change. If there is a marked difference in the rise of the fluid when the two jugulars are compressed separately, the test is considered positive.

While the procedure is not absolutely infallible, we believe it is one of extreme value and reliability; but we must keep in mind the fact that it has its limitations. The right lateral sinus is usually somewhat larger than the left, but this difference usually is not sufficient to vitiate the value of the test. However, on rare occasions, one sinus may be extremely small, or even missing, in which event the test might give misleading information. However, this anatomical anomaly is extremely rare. A number of years ago we had several cases in children in which the result of the test did not conform to the pathology found at operation. This was finally attributed to the fact that the patient was placed on his side and his head allowed to rest on the table without a pillow. The stretching of the muscles of the uppermost side of the neck had a tendency to compress the jugular on that side and also interfered with the compression of the vein on the lower side. This difficulty was obviated by being careful to support the head by pillows so that the cervical spine was in a straight line with the dorsal and lumbar region.

I believe the commonest source of error is in not being certain that the jugular is fully compressed and the carotid not interfered with. For this reason I feel that the operator himself should perform this part of the test. Personally, I find it better to stand behind the patient for this purpose. Of course, care must be taken to ignore changes in pressure caused by holding the breath, coughing, crying, etc., and, in nervous patients, especially children, it may be necessary to give a general anesthetic. If the test is done before the clot has formed sufficiently to obstruct the flow of blood in the sinus, or, in those cases in which the infection has occurred without clot formation, the test will not be of value.

TREATMENT:

While we read occasionally of cases presenting all the symptoms of Sinus Thrombosis which have recovered without operation, and even of healed cases discovered at autopsy, these are so rare that we are not justified in taking this possibility into consideration. The treatment is essentially surgical, and once the diagnosis is made the sinus should be opened and drained like any other abscess, as soon as possible. I will not take up your time by describing the operation in detail, but simply mention some procedures we have found advantageous. After the mastoid operation has been completed, the sinus should be freely exposed, both downward toward the bulb and backward toward the torcular. If the wall of the sinus shows any pathological change, this exposure should be carried backward until normal sinus wall is uncovered, even though this occasionally necessitates removal of the bone as far back as the torcular. This change in the sinus wall, in cases which have extended by contiguity, may show any degree of involvement from an engorgement of the vasa vasorum, a dull gray thickening, or a covering of protective granulation tissue, to an

actual necrosis of the vessel wall. And the clot itself may be firm and red, gray, or it may have broken down into actual pus. In the hemorrhagic type, the vessel wall may appear quite normal on inspection. This, however, should not hinder our incising it if the clinical symptoms have pointed to a systemic infection.

The sinus is then compressed with small gauze rolls placed between the bone and the sinus, which is then carefully incised with a very keen knife. This procedure, if carefully carried out, will give a good idea of the thickness of the inflamed sinus wall. If the sinus is thrombosed, this incision should be carried back to the limits of the clot, and a portion of the sinus wall may well be excised. The posterior plug is then released so that the remainder of the clot is flushed out. This plug should then immediately be replaced to avoid any unnecessary loss of blood, because if this is allowed to occur, it lessens the chances of a patient already critically ill. The lower portion of the sinus should be treated in a similar manner. Gentle suction with a small, soft rubber tube, connected with a syringe, often facilitates the removal of the clot. If the sinus is not thrombosed, or if the small plugs do not control the bleeding, the entire cavity of the bone should be rapidly and tightly packed with gauze, as any undue loss of blood is deleterious to the patient.

If no clot is found, it may mean that the thrombus is in the region of the jugular bulb, or that the infection has entered the bloodstream without the formation of a clot of demonstrable size.

JUGULAR LIGATION:

There has been a great deal of discussion as to whether the internal jugular vein should be ligated or not. Opinions vary, from those who maintain that the jugular need never be ligated, to those who believe that this should always be done. Our own experience has made us feel that there are some cases in which this procedure may be omitted. If the case is of recent origin, the clot firm, and the toxemia not profound, opening the sinus freely may be sufficient. However, in such a case, I believe the clot below the incision should be left undisturbed because of the danger of infected fragments being dislodged and carried down the jugular vein and causing lung abscess. If there is no clot, and the patient is in good condition, the sinus may be opened, packed, and surgery of the vein left to await subsequent developments. If the sepsis does not subside promptly, the vein should be tied in a very few days. This usually results in checking the septic condition. However, in nearly all cases, I feel it is safer if the jugular vein is tied before the sinus is dealt with. While the jugular vein is not the only avenue by which infection may be carried into the system, it is the chief one, and its obliteration does much to prevent a continuation of the bacterial invasion. Also, it prevents dislodged particles of clot being carried to the lung with the consequent disaster of lung abscess. The compression of the sinus, and its manipulation during the free exposure necessary, convince me that this is not an imaginary danger. The difficulty, I might say often the impossibility, of determining the actual condition of the clot is another factor in favor of ligation. If the diagnosis is certain, I believe it is wise to ligate the jugular as the first step of the operative procedure, as the transfer from the clean field in the neck to the infected mastoid wound can be made without the loss of time involved in the reverse procedure, and any step which shortens the time of the operation is advantageous to the patient, who, because of his septic condition, is often a poor operative risk. I have never seen any ill effect caused by the jugular ligation. In fact, I have seen both lateral sinuses opened and packed, and one jugular tied at intervals of a week, without any circulatory disturbance. The obstruction to circulation, if caused by a clot, is gradual, and the collateral circulation which is very free has been established before the ligation is done.

Another time-saving device is to ligate the jugular low in the inferior triangle instead of the upper triangle, and to approach the vein by going through the sterno-mastoid muscle just behind its anterior border, splitting the fibers by blunt dissection with Mayo scissors or a hemostat, instead of the usual approach around the anterior border of that muscle. This exposes the vein from its outer side and does not disturb the carotid artery. There is also less bleeding and less interference by cervical lymphatic glands. The vein may be separated from the artery and vagus, tied, and left in situ if it appears normal. We have noticed no ill effects from omitting to tie the common facial vein. However, if the jugular vein shows signs of infection, it should be doubly ligated low, severed between the ligatures, the upper end dissected out, and secured in the upper end of the incision, so that it may be utilized to drain

the region of the bulb. A small, rubber drain is placed in the lower end of the incision. The neck wound is dressed as necessary. The mastoid wound is usually dressed in about six days, the plugs controlling the sinus removed, and, if no bleeding occurs, they are left out. However, if the sinus bleeds, fresh plugs are immediately inserted.

Besides the usual supportive measures, small transfusions, 150 to 250 cc. blood, either daily or every other day, as may be indicated, both pre-operatively and post-operatively, have proven the most effective measure when Nature has seemed to need assistance in combating the infection. The necessity of transfusion is most clearly shown by a diminution in the percentage of hemoglobin.

The use of Prontosil solutions and Prontolin tablets (derivatives of para-amino-benzine-sulfonamide) in cases due to streptococcic infection has so often been accompanied by favorable clinical results that we are inclined to urge its use in infections of this type, although our experience has not been extensive enough to justify any dogmatic statements concerning its use.

10 cc. of Prontosil solution is given intramuscularly every four to six hours for the first two or three days, or until the septic symptoms show signs of abatement. If the bloodstream is infected, these injections are continued until the culture is negative. The dosage is then reduced to about one-half this amount, or succeeded by the administration of Prontolin tablets, four to eight, for several days. In severe cases ,this dosage may be increased to as much as 100 cc. in 24 hours, or .75 cc per pound of body weight. We have seen no unfavorable or alarming toxic effects, either immediate or remote, following the use of this dye. We have observed the precaution of prohibiting the use of any saline laxative during its administration because of the possibility of producing sulphemoglobinemia.

PROGNOSIS:

If the case is diagnosed and the abscess within the sinus drained early, the prognosis is good; but, if the case is not operated on until late, the prognosis is very grave. This division into early and late operations cannot be made by the calendar because, in the hemorrhagic type of mastoiditis, involvement of the sinus and a positive bloodstream infection may occur as early as seven to ten days after the onset of the ear infection, while in the type in which the infection extends by contiguity, several weeks may elapse before this complication appears. I believe this division into early and late cases can best be determined by the appearance of metastatic foci. Ordinarily, a case can be considered early if no metastases have occurred, but if these have made their appearance, it is a late case and a grave prognosis should be given. In one series of twenty-seven unselected cases of lateral sinus thrombosis at the St. Louis Children's Hospital, there were seven deaths. Five of these had metastatic foci before admission.

In another series of forty-four cases all the fatalities except one occurred in those which were not operated on until after metastases had occurred.

An analysis of twenty-two fatalities, due to lateral sinus thrombosis in children, in a series of sixty-two cases at the St. Louis Children's Hospital, compiled by Dr. Alexis Hartmann, disclosed the following facts:

17 are recorded as having had metastases
5 are recorded as having had no metastases.

Of these five cases, two, one aged two weeks, and one aged five months, were undiagnosed until autopsy. One had meningitis with streptococci in the spinal fluid before operation.

These figures demonstrate more emphatically than mere words the urgent necessity of early diagnosis and operation.

Thirteen of these twenty-seven cases developed meningitis, eight preoperatively and five postoperatively. As autopsy findings seemed to show no definite evidence of the direct local extension of the meningitis from the infected lateral sinus in most of these cases, it seems fair to assume that the infection of the meninges was often blood borne; and, consequently, that a bloodstream infection in sinus thrombosis is not merely a diagnostic sign, but also a positive menace, and that as long as it persists it may cause fatal complications.

COMING MEDICAL MEETINGS.

Rocky Mountain Medical Conference, Denver, July 19-21st.

Southern Medical Association, New Orleans, November 30-December 3, 1937.

Kansas City Southwest Clinical Society, Kansas City, October 5-8th.

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EDITORIAL

THE 1937 SESSION OF THE AMERICAN MEDICAL ASSOCIATION

The 88th Annual Session of the American Medical Association held in Atlantic City, June 7-11th, was attended by over 10,000 physicians. One hundred sixty-eight of a possible 175 delegates were present for the session of the House of Delegates. The scientific sessions, the scientific and technical exhibits and the general clinical sessions were of the usual high caliber.

Secretary West's report reflected increased growth of membership, there being 105,460 members enrolled on April 1st, 1937. The number of Fellows of the Association on this date was 66,296, of whom 227 were from Arkansas. Our state ranks quite low in the proportion of fellows to members and it is to be hoped that an increasing number of the members of the Arkansas Medical Society will qualify as Fellows of the American Medical Association, thereby more actively supporting the policies of the national organization, as well as contributing to its financial strength.

The report of the Board of Trustees showed an increase in gross earnings and miscellaneous income of the Association over that of 1936. The various Councils have been active during the year in their respective problems, the results of their studies being more valuable to the physician from year to year. The Bureau of Legal Medicine and Legislation and the Bureau of Medical Economics are constantly expanding their activities in the interests of the organized medical profession. The number of new proposals for the organization and distribution of medical services to special population groups is rapidly increasing. These schemes appear to give primary consideration to the methods of payment for medical services. The quality of service and the medical ethics involved are given subordinate consideration, if they are mentioned at all.

The House of Delegates considered many important resolutions, among which may be briefly mentioned:

1. Provided for the creation of a Council on Industrial Health.

2. Approved the campaign against syphilis.

3. Recommended that all county societies cooperate with rural organizations in providing good medical service to their respective communities.

4. Defined "free choice of physician" as applied to contract practice and so amended the principles of medical ethics.

5. Defined hospital care under group hospitalization contracts as to consist of room, bed, board, routine nursing care and routine drugs only, excluding all medical care.

6. Provided that appeals to the Judicial Council shall be perfected within six months.

7. Provided that the staffs of hospitals approved for intern training shall be members of their county medical societies.

8. Stressed the value of preventive medicine.

9. Called attention to the advantages in not over-crowding hospitals for mental diseases.

10. Adopted the report of the special committee on birth control. The recommendations of this committee are: (1) That the American Medical Association take such action as may be necessary to make clear to physicians their legal rights in relation to the use of contraceptives. (2) That the American Medical Association undertake the investigation of materials, devices and methods recommended or employed for the prevention of conception, with a view to determine physiologic, chemical and biologic properties and effects, and that the results of such investigations be published for the information of the medical profession. (3) That the Council of Medical Education and Hospitals be requested to promote thorough instruction in our medical schools with respect to the various factors pertaining to fertility and sterility, due attention being paid to their positive as well as to their negative aspects. The committee emphasized the fact that its report was limited to a consideration of the prevention of conception, only as it refers to the relation of "physician and patient." The action on this report was influenced, first, by the fact that so many physicians have been giving birth control information to patients for years, without formal approval, and secondly, by the fact that public interest in birth control, combined with the medical ban on it, has opened the way to an immense amount of dangerous quackery and incompetent advice. It was particularly emphasized that the Association's approval of birth control clinics be limited to institutions licensed for the care of the sick and under medical supervision.

11. Considered the resolution submitted by the New York state society requesting (1) the formulation of a national health policy, (2) the establishment of a working definition of "adequate medical care," and (3) that provision be immediately made for the furnishing of adequate medical care to the medical indigent, the costs to be met from public funds, together with clarifying proposals. This resolution was seriously considered at length in committee, modified, and adopted by the House of Delegates. The adopted resolution recommends "that the bureaus, councils and committees of the Association continue their studies of the need for and the methods of distributing medical care to the end that the American Medical Association shall continue to do everything possible to promote and protect the health of the American people. The American Medical Association reaffirms its willingness, on receipt of direct request, to cooperate with any governmental or other qualified agency, and to make available the information, observations and results of investigation together with any facilities of the association."

12. Heard Senator J. Hamilton Lewis, Democrat, Illinois, a proponent of social security legislation, invite the cooperation of the Association with the administration at Washington in laws which would be a medical service to the "helpless and afflicted." The senator stated that this would mean government aid for those too poor to pay the cost of adequate medical service. The speaker called attention to the changes in governmental functions, both in the United States and abroad, to the increasing concern with the individual as a citizen, not as a "patient," as physicians have been accustomed to term individuals. The government needs the citizen, and since physicians assume his medical care, the government is compelled to treat physicians as its officials. Senator Lewis advocated amendments to the Social Security Act which would provide for the medical and hospital care of those unable to pay these costs, preserving the free choice of physician, the whole administered under the advisory supervision of organized medicine. The House of Delegates referred the entire subject for the Board of Trustees for further action.

13. Urged the formation of a national department of health under one head, in which would be consolidated all the health activities of the government.

14. Adopted resolution condemning the indiscriminate sale of the barbiturates.

Irvin Abell, Louisville, was elected president and the 1938 session will be held in San Francisco.

AN APPRECIATION

The action of the Council at the 1937 session in presenting Val Parmley, retiring chairman of the Committee on Medical Legislation of the Society with a watch as a token of the appreciation of the Society for his unselfish service on this committee has probably not been made known to all the membership. The Journal feels it proper to comment upon the eight years of loyalty and self-sacrifice which Val Parmley has given to the Society as member and chairman of this most important committee. During this period the Society's gains in legislative affairs have been sufficiently striking as to attract the attention of the legislative committee of the American Medical Association and of adjacent state societies. These decided advances in the betterment of the public health and for the medical profession have been achieved only by the most diligent and time-consuming effort on the part of no more than six or seven members, by far the major portion of the chore being performed by the retiring chairman of the committee. This has been accomplished at a no inconsiderable personal loss, as we can well testify. The successful attainment of desired legislation as well as the defeat of undesirable bills requires almost constant vigilance, taxes the political sagacity and permits no opportunity for the performance of other activities while the legislature is in session. To this Herculean task, Val Parmley has freely and gladly given his all for the good of the Arkansas Medical Society. He now retires with a record of "faithful service." Yet we well know that he will be the first to respond to a call for help in any activity of the Society. For the membership, The Journal salutes you, Val!

EDITORIAL COMMENT

SUMMER MEETINGS

During the hot months ahead county medical societies are prone to drop all organizational activity. No one can deny but that there is merit to cessation of a considerable degree of activity other than the minimum essential during this heated term, however, it is more than wise that county society members keep in closer contact with one another than is our custom in this section. The summer "outing" meeting offers such an opportunity. Accessible to all localities in Arkansas are sites where the members and families of our societies may gather in a picnic session with pleasure as the motivating purpose. These meetings rank equally with those sessions devoted to scientific aims, as they promote the good fellowship which is essential in the medical profession. The Journal will hopefully wait for a report of the first such outing session held in the state.

LAWS OF ARKANSAS CONCERNING PHYSICIANS

During June a copy of the Society's pamphlet, "Laws of Arkansas Concerning Physicians," was mailed to each member. This booklet is the result of long and arduous study by our attorney, Hon. Peter A. Deisch. Members are urged to familiarize themselves with its contents and to keep it handy for subsequent use. Suggestions for its improvement in the event that a second edition is published will be appreciated.

RESOLUTION OF RESPECT ON THE DEATH OF DR. CHARLES W. HORTON

WHEREAS, Once again Death hath called a fellow Physician from our midst, completing his work in ministering to the needs of the afflicted;

AND WHEREAS, He having been a true and faithful Fellow Physician among us, and having devoted a great part of his life to organized medicine;

THEREFORE, Be It Resolved by the Benton County Medical Society in session at Rogers, Arkansas, May 13, 1937, in testimony of its loss, to tender to the family of the Deceased our sincere condolence in this deep affliction, and that a copy of this resolution be spread upon the minutes of the Benton County Medical Society and a copy be sent to the Family of the Deceased.

Respectfully submitted by,

J. T. POWELL,
C. S. WILSON,
GEO. M. LOVE,
Committee.

A great deal of the joy of life consists in doing perfectly, or at least to the best of one's ability, everything which he attempts to do. There is a sense of satisfaction, a pride in surveying such a work—a work which is rounded, full, exact, complete in all its parts—which the superficial man, who leaves his work in a slovenly, slipshod, half-finished condition, can never know. It is this conscientious completeness which turns work into art. The smallest thing, well done, becomes artistic.

WILLIAM MATHEWS.

PROCEEDINGS OF SOCIETIES

The second annual meeting of the Doctor Smiths of Arkansas was held at St. Mary's Hospital at Russellville June 3rd. Addresses were made by John M. Smith, Morrilton; L. M. Smith, Russellville, and R. L. Smith, Russellville. Officers elected are: M. T. Smith, Conway, President; L. M. Smith, Russellville, Vice-president, and John M. Smith, Morrilton, Secretary-treasurer.

The Randolph-Lawrence County Medical Society met May 18th at Black Rock for a program as follows: "Endocrine Troubles Peculiar to the Female," M. A. Baltz, Pocahontas, and "Precancerous Conditions," F. A. Gray, Batesville. The meeting was followed by a social hour and the installation of the following officers: President, A. G. Henderson, Imboden; Vice-president, M. A. Baltz, Pocahontas; Secretary, Chas. D. Tibbels, Black Rock.

The Pope-Yell County Medical Society met in dinner session at Russellville May 13th for the following program: "The Diagnosis of Gallbladder Disease," Roy Millard; "The Gallbladder Diseases," Robert Hood, and "Surgical Treatment of Gallbladder Disease," L. M. Smith.

The Tri-County Clinical Society met at Hope May 27th for the following program: "Fracture of the Hip," T. M. Oxford, Shreveport; "Diarrhea," R. T. Lucas, Shreveport, and "Addison's Disease, Atrophic Type: Case Report," J. G. Martindale, Hope.

O. G. Hirst, Councilor.

The following program was presented to the Miller County Medical Society May 26th: "Endocrinological Treatment of Dysmenorrhea," W. A. Hutchinson and "Treatment of Appendicitis and Peritonitis," T. F. Kittrell.

The Greene County Medical Society was addressed May 13th by R. W. Cupp and J. C. Land.

The Randolph-Lawrence County Medical Society met with T. C. Guthrie at Smithville June 8th for the following program: S. Dysentery," H. B. Hull, Mammoth Spring; "Rheumatoid Arthritis," C. C. Ball, Ravenden, and "Pyorrhea," Edwin Dunn, D. D. S., Imboden.

Chas. D. Tibbells, Secretary.

The Sebastian County Medical Society met June 8th for the following program: "Treatment of Nonunion of Fractures and Special Treatment of Fracture of the Patella," Joe F. Shuffield, Little Rock, and "Treatment and Management of Syphilis," Ewell I. Thompson, Little Rock.

L. M. HENRY, Secretary.

The Benton County Medical Society met in dinner session at Bentonville June 10th for the following program: "Intestinal Obstruction," B. E. De Tar; "Allergy in General Practice," O. T. Blanke, and "The More Common Communicable Diseases in Children," M. C. Davis, all speakers of Joplin.

Geo. M. Love, Secretary.

The Ninth Councilor District Medical Society met at Harrison June 1st for the following program: "Review of the Common Fractures of the Lower Extremity," Joe F. Shuffield; "Recent Advances in Obstetrics," S. B. Hinkle; "Social Security Act As It Pertains to the State Health Department," W. B. Grayson; "Cancer," Geo. F. Jackson; "Present Treatment of Tic," Pat Murphey, all speakers of Little Rock. The society held a banquet in the evening at which President Johnston made an address. The following officers were elected: President, D. K. McCurry; Vice-president, H. V. Kirby, and Secretary-treasurer, J. H. Fowler. The society will next meet in Harrison on December 8th.

The Eighth Councilor District Medical Society met at Russellville June 22nd for the following program: "Diagnosis and Treatment of Simpler Eye Conditions," L. Gardner, Russellville; "The Lawyer and the Doctor," Mr. Robert White Russellville; "Cancer," Geo. F. Jackson, Little Rock; "Obstetric Experiences—Believe Them or Not," Round table presentation, and Report of Councilor, S. B. Hinkle, Little Rock. The meeting concluded with dinner. The Society will next meet at Little Rock in December.

The Crawford County Medical Society was addressed June 22nd by Ralph Weddington, Fort Smith, on "Diarrheas of Infancy."

The Tri-County Clinical Society met at Prescott June 24th for the following program: "Diagnosis of Typerthyrodism," Harry Hays, Little Rock; "Anesthesia," Bryce Cummins, Little Rock; "Comments on Common Conditions of the Acute Abdomen," Paul Hughes, Prescott, and "Metastatic Sarcoma of the Lungs," F. W. Regnier, Prescott.

PERSONALS AND NEWS ITEMS

F. J. Scully, Hot Springs National Park, has been elected grand commander of the Knights Templar of Arkansas.

R. T. Smith, Fort Smith, has been elected vice-president of the Arkansas Hospital Association.

Alfred Hathcock, Fayetteville, recently completed a three months postgraduate study in New York, Chicago and at the Mayo Clinic.

B. C. Middleton, Texarkana, has been appointed health officer for Miller county.

BORN—On May 24th, a son, to Dr. and Mrs. T. P. Foltz, Fort Smith.

John M. Stewart, Van Buren, addressed a community meeting at the City Heights Methodist Church June 4th on "Communicable and Contagious Diseases."

The following staff has been elected at the Baptist State Hospital, Little Rock: Joe F. Shuffield, Chief; K. W. Cosgrove, Vice-chief, and T. Duel Brown, Secretary.

Ernest Stroud has been elected president of the Jonesboro High School Alumni.

F. Walter Carruthers attended the recent session of American Orthopedic Association in Lincoln and Omaha.

H. W. Hundling, Little Rock, recently addressed the district meeting of the State Nurses' Association.

The Garland County Medical Society sponsored an outing of the senior class of the University of Arkansas School of Medicine at Hot Springs National Park, May 28th. The day's activities included bathing and visits to the bathhouses, visits to the government free clinic, the transient camp and the Army and Navy General Hospital and a luncheon. Luncheon speakers were D. C. Lee, Geo. B. Fletcher, Supt. Libbey of the national park service and Arnold Henry, president of the class.

MARRIED—John McCollough Smith, Morrilton, and Miss Marie Angehr, Clarksville, on June 17th.

The State Medical Board of Arkansas Medical Society has elected the following officers: President, W. A. Snodgrass, Little Rock; Vice-president, L. T. Evans, Batesville, and Secretary-treasurer, L. J. Kosminsky.

H. Fay H. Jones, Little Rock, has sailed for Europe where he will do special work in London, Paris and Rome for the next two months.

L. J. Kosminsky, Texarkana, has been appointed district commander of the twelfth district of the American Legion.

T. W. Hardison, Morrilton, recently attended the National Conference on State Parks at Swathmore, Pennsylvania.

Pierre Redman has moved from Fort Smith to Mena where he will be associated with B. H. Hawkins.

Fount Richardson, Fayetteville, has been appointed physician to the University of Arkansas.

A. C. Shipp, Little Rock, recently attended a meeting of the board of directors of the National Tuberculosis Association in Milwaukee.

The following members were registered at the Atlantic City session of the American Medical Associations: S. J. Allbright, Searcy; W. R. Brooksher, Fort Smith; G. E. Cannon, Hope; C. M. Harwell, Osceola; C. W. Jones, Benton; F. A. Jones, Piggott; J. K. Jones, Lepanto; M. J. Kilbury, Little Rock; A. C. Kirby, Little Rock; M. F. Lautman, Hot Springs National Park; W. V. Laws, Hot Springs National Park; J. T. McLain, Gurdon; W. H. Mock, Prairie Grove; J. A. Moore, El Dorado; W. V. Newman, Little Rock; H. A. Ross, Arkadelphia; E. M. Smith, Hot Springs National Park; W. Decker Smith, Texarkana; J. E. Stevenson, Fort Smith; H. A. Stroud, Jonesboro; and A. G. Sullivan, Hot Springs National Park.

Euclid M. Smith, Hot Springs National Park, presented "The Underwater Therapy of Arthritis," with motion picture before the American Therapeutic Society at Atlantic City, June 4th.

M. J. Kilbury, Little Rock, presented "Tularemia at the Breast," before the American Society of Clinical Pathologists at Atlantic City in June.

OBITUARY

ROBERT RODNEY DALE, aged 52, of Texarkana, died at the Army and Navy General Hospital, Hot Springs National Park, May 10th after an illness of three months. Born in Arkadelphia in 1885, the son of the late Dr. J. R. Dale, his preliminary education was received in the Arkadelphia schools and his academic and medical education at the University of Virginia, where he graduated in medicine in 1913. He was married to Miss Bessie Tucker of Texarkana in April 1936, who, with a two-months old son, survive him. He was a member of the staff of the Michael Meagher Hospital, of the Presbyterian Church, of the Scottish Rite Masonic bodies, and a Fellow of the American College of Surgeons. An active member of the Miller County Medical Society for years, he was at the time of his death, its president.

JOHN MARION HOOPER, aged 67, died at his home in Batesville May 19th from injuries suffered in an automobile accident May 15th. Born in Independence County in 1870, his preliminary education was obtained in the schools of the county and at Arkansas College in Batesville. He graduated from the Memphis Hospital Medical College in 1896. During the World War he attained the rank of major, medical corps, and subsequent to his discharge became lieutenant-colonel in the medical reserve corps. He had recently been appointed a member of the board of trustees of the Arkansas Tuberculosis Sanatorium and had served several terms as county health officer for Independence county. Surviving relatives are his wife, a daughter and two sons.

PLEASANT E. TERRY, aged 63, died at his home in Holly Grove April 29th of a heart attack. A graduate of Memphis Hospital Medical College in 1899, Dr. Terry had practiced in Monroe county for nearly forty years. He was a member of the Monroe County Medical Society and had represented the Society as delegate in several annual sessions of the Arkansas Medical Society. He served his society as president in 1935. He was an elder in the Presbyterian church and a member of the Masonic lodge. Surviving him are his wife, two daughters and two sons, one of whom, J. B., is a

JAMES A. FOLTZ, aged 59 years, died at his home in Fort Smith May 22nd after an illness of several months of heart disease. Born in Memphis, March 25, 1878, he had resided in Fort Smith since he was a year old. His education was obtained in the Fort Smith schools but he served as a sergeant in the United States army during the Spanish-American campaign following completion of his academic studies and prior to entrance into Tulane University for his medical course. Graduating from that institution in 1901 as valedictorian and president of his class he returned to his home to begin practice. His civic interests were most extensive; a past-president of the Lions Club, a director of the Chamber of Commerce, a member of the school board, member of all the Masonic bodies, a past commander of the Knights Templar, a member of various fraternal orders, an organizer and active committeeman in the erection of the children's sanatorium building, a member of the board of health, and a member of the Episcopal church. In the organized medical profession he was an active worker, having served his county medical society as president and as delegate to the state society on several occasions. He was special representative from the Arkansas Medical Society to the preliminary conference on medical economics held by the American Medical Association in 1931. In the American College of Surgeons he held a charter membership and had served in various committee assignments in that organization. The Fort Smith and Western Hospital Association was organized by him and he remained as its chief surgeon until his death. He had been division surgeon for the Frisco Lines for many years. In the nursing training schools of Sparks Memorial Hospital and St. Edwards Mercy Hospital he lectured on anatomy from their inception. At Sparks Memorial Hospital he served as chief of staff for several years. He was married to Miss Janie Price November 5th, 1902, who survives him. Other surviving relatives are his son, Dr. Thomas Price Foltz, who had been associated with him in practice in Fort Smith since 1936; two other sons, and a daughter.

JOSEPH B. SHAW, Hot Springs National Park, aged 57 years, died at a Detroit hospital May 28th after a long illness. Born at Cedar Glades, Arkansas, September 20, 1879, he received his preliminary education in the schools of Garland and Montgomery counties and he graduated from the University of Arkansas School of Medicine in 1905. He first practiced at Buckville but moved to Hot Springs National Park in 1912. Elected as coroner in 1916, he served two terms. For eight years he had been president of the Board of Health. He was married to Miss Myrtle L. Irwin in 1902, who, with a son, Dr. E. I. Shaw, and a daughter, survives him.

RANDOM THOUGHTS OF THE SECRETARY

May 4th. To Thos. Douglass' surprise party, no surprise for reasons we well know, but a happy occasion and one where fellowship is most hearty. H. Moulton and Earle Hunt express the sentiments of all when they speak of this good friend and faithful physician, a man who never said a word against any man. This giving of flowers to the living has everything to commend it and we finally take leave of a group in whose hearts there has been made to glow a spirit of friendliness and understanding, conscious that this night honor has been done A Worthy Man.

May 11th. Advocating a more extensive employment of the roentgen rays in the therapy of infections we appear before the county medical society. Discussion is freely indulged in but withal, charitable.

May 12th. Smith presents himself with a lymphangitis thus showing that bread cast upon the waters at the last society meeting, when we advocated the wider application of the roentgen ray in infections, is now returned to us.

May 13th. This date the son presents no rise of temperature, a hope of many days realized.

May 17th. But for a kindly reference by H. Moulton, this evening's staff meeting would have been a total loss, affording us no opportunity to discuss roentgen rays.

May 18th. This day E. C. Moulton calls with a sore finger seeking relief by roentgen ray. It would seem that we are developing a tremendous professional following in our advocated therapy.

May 19th. This is chief surgeon's day in the city. Miller of the Kansas City Southern inspires a delightful chicken luncheon by Hoge with post-luncheon anecdotes somewhat restricted to the general subject of the basic material for the manufacture of corn cob pipes. Woolsey of the Frisco discusses many subjects with us during the afternoon.

May 20th. Visiting Fayetteville briefly to drive Peggy and the son home, we tarry at City Hospital to greet Alfred Hathcock and Henry, the only doctors about at 8:30 A. M. On the return pausing at the airport to observe about thirty army planes take off, each take-off enthusiastically watched by the young son.

May 21st. A prominent local physician's wife observes that it would be just like a doctor's wife, packing her bag to go to the hospital for delivery, that is incumbent upon her to first shake out the rice.

May 22nd. Foltz is gone! How hard it is to realize that no more shall we see his cheery smile, the wave of his hand, that left one which gave us such a battle a few years back, no more shall we be called the "cocky little corporal." We think with Riley: "He has wandered into an unknown land, and left us dreaming how very fair it needs must be, since he lingers there."

May 25th. Everett Moulton gives oral testimony in the presence of a witness as to the value of the roentgen ray in the therapy of infections, gratifying us no end. This night the guest of Savery at another of those very good Crawford County Society banquets where good fellowship and good food combine to make a real event. Weddington's story, simply combining a husband, a guest, the dogs, a deaf wife and flatus, is one to be heard again.

May 26th. We turn westward with Peggy and Bill Riley, traversing the plains of Oklahoma and Kansas, timing our arrival at Garden City simultaneously with a minor dust storm, our enthusiasm at having bested Jones' estimate of our progress considerably curtailed by a view of the dusty sky. A good break comes our way, the first rain in many a day for this parched country, affording us a comfortable night's rest.

May 27th. The customary discouraging entry into Colorado, our spirits reviving north of Pueblo when the majestic Rockies, still snow-capped, come into view. With gayety we herd the car northward, parking at the cottage door in early afternoon and then to considerable labor with baggage and supplies for the youngster and better half for the summer to be stowed away as only Peggy would have them.

May 28th. We continue as the hired man, our varied activities enlivened only by the radio catching on fire, and do we pat ourself on the back for bringing that fire extinguisher to this cottage in the woods!

May 29th. This morning we spend in Denver, a city noteworthy only because of its location adjacent to so many scenic attractions.

May 30th. With rain and colder weather, the wife and son see us off at Denver, the mist of late afternoon and a muggy day would happen to come along on this particular occasion. So tiring of the forlorn view from the train window, we read "Uncle Sam, M. D.," a capable criticism of state medicine by Paul A. Williams in May Nation's Business, the careful study of which we recommend to all physicians.

May 31st. Our day in Kansas City is harassing; a hotel strike, a temperature of 90 immediately following our sojourn where 60 was maximum, a holiday.

June 1st. We take post at our accustomed stand.

June 3rd. Personal to Peggy: For the first time in twelve years we spend this day apart but how thankful for that telephone in your cottage and this one here.

June 6th. En route across Illinois, Indiana and Ohio to Atlantic City, traveling as first section of The American, all of our friends traveling on the second section of which we obtain glimpses at Indianapolis, Richmond and Columbus. Awake as we come into Pittsburgh, the Golden Triangle beautiful in a nocturnal setting which makes the dense smoke appear as but a gentle haze.

June 7th. Glimpsing the famous boardwalk again and busy greeting friends of former sessions: Wells of Rhode Island; Elington of Maine; the entire Texas and Louisiana delegations; Irwin of Montana; Roberts of Georgia; Hayden, Fishbein, West and others of the official family; a happy occasion. At the evening banquet the Kiwanis Chorus signs of fraternization beyond compare—a joyous and carefree gathering of the U. S. Field Artillery and the U. S. Marines. Mock learnedly discusses the action of digitalis with the president of the California Heart Association.

June 8th. Noting that while resolutions presented to the House are few in number, their demands for careful consideration exceed most of those in other years; this, in particular, applying to a "handle with care" document from New York state. Spending some time in committee laboring to perfect a definition of what constitutes hospital care, a decision of great moment. Meeting the Strouds and the newest addition to that group, just graduated, facing the state board with trepidation. Along the boardwalk, noting Lautman holding court, and subsequently meeting the immediate past vice-president, Sullivan, with whom we pause to comment on trends in many activities.

June 9th. With briskness we walk to the steel pier, a

good three miles, meeting on the way, Kilbury, who recounts exploits at archery the night before. During the day we become a confidante of Low of Pueblo who knows all the details of Fay Jones' visit to Houston some months back. In the exhibit hall we encounter Allbright, just passing through, gathering a few souvenirs of the occasion.

June 10th. With celerity unheard of in governmental circles, Senator Lewis visits the House, the relation of cause and effect between yesterday's resolution and his appearance becoming somewhat confused in our mind. Forthwith does the senator proceed to dump into our collective laps a colossal headache (who are we to mix metaphors in this fashion?). Mock, as chairman of tellers, has no opportunity to orate, all elections being uncontested. After brief postmortems, we cogitate the variations in standard and daylight-saving time as applied to train departures, finally calling a cab for the station where we climb aboard the first train out, the result of which being that we leave Philadelphia four hours earlier than we had planned, daylight-saving time contributing one, two, three or four hours to this differential; not yet are we certain how much.

June 11th. With many a doctor aboard, the Spirit of Saint Louis cruises westward, we holding animated conversation with Skinner, absorbing ideas which we hope can be applied in our circle. With a perverseness which must be terribly annoying to our associates, we continue westward at Saint Louis, passing up a dinner date, as well as the opportunity to trek homeward this night and put in a half-day of work tomorrow, the all motivated by a desire to visit the family in Colorado over Saturday and Sunday.

June 12th. With nonchalance we phone from Pueblo for Peggy to meet us at Denver, the excitement which reaches us over the phone from the youngster as he receives this information, not to comment upon the reserve with which the better half expresses her pleasure at this unexpected turn of events, being more than ample satisfaction for these thousand additional miles. And so to the zoo where the seals stage a fight, the bears prowl, the monkeys cavort, a manner of action which the young son adopts in its entirety for the occasion, adding certain modifications of his own which contribute to the general clamor.

June 13th. To the mountains for a considerable drive but mostly enjoying the restful view of the Flatirons, the lakes, the countryside and the companionship of our own for the day, departing in more of a happy frame than on this occasion two weeks ago.

June 14th. Perched as a railbird on the stone walls of the Kansas City station reading the evening news, we are taken in tow by Louie Allen for a meeting of the guiding hands of the Kansas City Southwest Clinical Society, the committee activities of this great organization affording us an insight into the reason for the continued success of this meeting. Privileged to comment, we join forces with the winners in a debate over the registration fee, and now accept the thanks of Fowler, Gladden and Owens for the saving that will be theirs October 5th.

June 15th. Occupying ourself with the accumulated mail and endeavoring to grasp the changes in our immediate environment, we put in a busy day, taking time in the late afternoon to catch up on these paragraphs, possibly because Clarence Munns so favorably referred to our effort at Atlantic City. His kindly reference makes this old countenance beam but his story of the circus acrobats made the welkin ring, as it were.

June 22nd. A torrid day but we drive to Russellville accepting Bob Hood's invitation for the Eighth District meeting. Marvel of marvels, a medical meeting run on schedule, to which we arrive late for dinner, a greater marvel. Talking of the American Medical Association session and greeting those in attendance as they depart, noting in particular that the third district councilor, Stewart, is a long distance traveler himself. Engaging in sprightly repartee wth Bob and Roy Millard as we do justice to the dinner, returning home in time to hear that fast and furious first round over the radio.

June 26th. With no cessation of the heat, we become philosophic, giving this issue our final touches and then becoming active in arranging a training schedule for the summer encampment of Arkansas' best medical detachment.

RESOLUTION TO DR. J. M. HOOPER

Whereas: God in his infinite wisdom has suddenly snatched from our midst, our friend and colleague, Dr. John M. Hooper, of Batesville, Ark., and

Whereas: Dr. Hooper was endeared to us by his genial personality, his kindliness and charitable nature while in Batesville and Independence County. Not only did his traits of character appeal to us and make us desire to emulate them, but we shall ever remember his medical skill. He was ethical with his dealings with other physicians and was a friend to all who knew him. He was not only a leading man in his profession, but was one of our best citizens.

Therefore: Be it resolved that the Independence County Medical Society in session assembled express our appreciation for the noble work that Dr. Hooper has done among us and that we recommend to the members of this society that they follow the high ethical standards which Dr. Hooper unfailingly followed and,

Be it further resolved that we express our sympathy to Mrs. John M. Hooper and children for their irreparable loss, and a copy of these resolutions be sent to Mrs. John M. Hooper and children, and a copy be spread on the minutes of this society and that a copy be sent to the press.

L. T. EVANS, M. D.,
O. J. JOHNSTON, M. D.,
Committee.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

The Union County Medical Auxiliary met at the home of Mrs. David Levine, El Dorado, April 30th, for a lovely luncheon. Officers for the incoming year were elected at this time.

President—Mrs. J. K. Sheppard.

First Vice-president—Mrs. David Levine.

Secretary—Mrs. Berry Moore.

Treasurer—Mrs. J. G. Mitchell.

May 3rd and 4th the members of the Auxiliary assisted Miss Erle Chambers in Tuberculosis Clinic work. Some eight or nine hundred children were given the test. Mrs. J. B. Crawford is County Chairman for this clinic. Mrs. David Levine is City Chairman.

The Pulaski County Medical Auxiliary met at the home of Mrs. W. A. Snodgrass, with assistant hostesses, Mrs. Paul Mahoney, Mrs. W. E. Bailey, Mrs. C. A. Arkebauer, Mrs. C. W. Garrison and Mrs. W. C. Langston, for a lovely luncheon, on April 21st.

Mrs. R. C. Kory, president, presided during the business session.

Officers for the coming year were elected as follows:

President—Mrs. Bryce Cummins.

President-elect—Mrs. W. A. Snodgrass.

First Vice-president—Mrs. A. C. Shipp.

Second Vice-president—Mrs. D. M. Switzer.

Secretary—Mrs. B. A. Bennett.

Treasurer—Mrs. W. L. Sadler.

Publicity Secretary—Mrs. Pat Murphey.

Historian—Mrs. W. N. Freemyer.

Parliamentarian—Mrs. R. A. Law.

The May meeting will be a pot luck dinner at the home of Mrs. W. L. Sadler, for the doctors and their wives. This will be the last meeting until fall.

Mrs. Joe Tyson was hostess to members of the Woman's Auxiliary to the Bowie and Miller Counties Medical Society, May 28th, at her home in Texarkana. Mrs. Tyson was assisted by Mrs. Roy Baskett and Dr. Francis Spinks.

Mrs. Albert Mann directed the business session, when reports of the Arkansas state meeting were given by Mrs. Ruel Robins and Mrs. Decker Smith, and of the Texas state meeting by Mrs. William Hibbitts, Mrs. Allen Collom and Mrs. J. T. Robison.

Mrs. N. B. Daniel then took charge of the business session and announced committees for the coming year.

Mixed summer flowers decorated the table, where Mrs. Mann and Mrs. Daniel presided and served an ice and sandwich plate.

The Washington County Medical Auxiliary met April 15th at the home of Mrs. P. L. Hathcock and made supplies for the City Hospital. Ten members were present. On May 4th dinner was served to eight members of the Auxiliary at the Washington Hotel.

On May 18th nine members met at the home of Mrs. Richard Miller and made draperies for the City Hospital.

The Woman's Auxiliary to the Ouachita County Medical Society was entertained at a delightful dinner by Mrs. J. S. Rinehart and Mrs. C. S. Early at the home of the former.

The three small tables were arranged and decorated with quantities of spring flowers and each table held a centerpiece of mixed flowers.

The president, Mrs. R. B. Robins, presided and plans were discussed for the year's work. Mrs. S. A. Thompson reported on the state meeting and Mrs. A. Davidson was leader of the interesting program on "Things of Interest to Doctors and Doctors' Wives."

Covers were laid for Mrs. E. J. Byrd of Bearden, Mrs. J. P. Clemens of Mt. Holly, Mrs. R. B. Robins, Mrs. J. S. Rinehart, Mrs. C. S. Early, Mrs. R. R. Robins, Mrs. B. V. Powell, Mrs. J. B. Jameson, Mrs. S. A. Thompson, Mrs. R. C. Kennerly, Mrs. A. Davison, Mrs. J. W. Meek, and Mrs. S. D. McGill.

The Garland County Auxiliary has elected the following officers: President, Mrs. Leon King; Vice-president, Mrs. O. E. Biggs; Corresponding Secretary, Mrs. Euclid M. Smith; Recording Secretary, Mrs. T. N. Black, and Treasurer, Mrs. O. A. Smith.

Mrs. E. A. Buckley was hostess to the Auxiliary to the Saline County Medical Society at her home in Bauxite May 19th. Talisman roses were artistically arranged in the rooms. The president presided over a short business meeting at which time the auxiliary voted to place Hygeia in the library beginning next fall. During the social hour the hostess served delicious refreshments.

RESOLUTION

Whereas, God in his infinite wisdom has suddenly taken from our midst our friend, the wife of Doctor E. H. Harris, member of our society and,

Whereas, Mrs. Harris was endeared to all of us, her sweet personality, her kindness to all, her lovable disposition and noble character and,

Whereas, she has left her husband and children to fight the battles of life;

Therefore, be it resolved, that the Lonoke County Medical Society in session assembled express our sympathy to Doctor Harris and children for their irreparable loss; and that a copy be sent to Doctor Harris; that a copy be spread on the minutes of the society and that a copy be sent to The Journal of the Arkansas Medical Society.

E. A. CALLAHAN, M. D.
F. A. CORN, M. D.
T. E. BENTON, M. D.

BOOK REVIEWS

Surgical Pathology of the Thyroid Gland. By Arthur E. Hertzler, M. D., Surgeon to the Agnes Hertler Memorial Hospital, Halstead, Kansas; Professor of Surgery, University of Kansas. 238 illustrations. Pp. 298. Philadelphia: J. B. Lippincott Company, 1937.

This is the eighth in a series of monographs on surgical pathology and it will be as popular as the others. Hertzler writes as if he were in conference with the reader, reviewing cases and some few statistics, the all with the spirit of welcoming the reader's opinion and giving due consideration thereto. It is easy to visualize the personality of the author as you read his work, a practical, comprehensive study of the pathology of the thyroid.

A Diabetic Manual. By Anthony M. Sindoni, Jr., M. D., Chief of the Diseases of Metabolism at the St. Agnes Hospital; Chief Consultant on the Diseases of Metabolism at the Oncologic Hospital; Physician to the Medical Dispensary of Presbyterian Hosptal, New York: Whittlesey House, 1937.

Dr. Sindoni's manual is a very important contribution to our work on diabetes mellitus. It is written in such a manner that the patient can easily understand his condition, and by this understanding can more readily see why such a rigid regime is necessary for his well being. The manual is divided into three sections as follows:

Section I. Questions asked the physician by the person who has diabetes, and the answers. This section is indeed gratifying to the physician who has to answer all of his patients questions.

Section II. What to know. This section takes up the incidence of diabetes, the symptoms, diagnosis, the use of insulin, and protomine zinc insulin and diets.

Section III. What to do. This section describes the treatment. When and how to give insulin is discussed, and also how to calculate the diet in household or metric systems.

The book is well written and covers all the phrases of dabetes mellitus, and should be well received by diabetics as well as physicians.

Medical Treatment of Cataract. By A. Edward Davis, A. M., M. D. Formerly Professor of Opthalmology, New York Postgraduate Medical School and Hospital; Consultant Opthalmologic Surgeon to same. Pp. 115. Price $3.00. Philadelphia: F. A. Davis Company, 1937.

From our first knowledge of cataract the treatment has always been considered as surgical. Many remedies of a non-operative nature have been tried and discarded. During the past few years, however, with an ever increasing knowledge of the effect of diet and the action of the hormones and vitamines upon nutrition much attention has been given to their effect upon the crystalline lens.

The author since 1902 has been experimenting with lens antigen in the treatment of cataract. In this little volume much material is brought forward in a very convincing manner to lend support to his statement, "In my own hands lens antigen has proven most beneficial, as by its use the progress of the ordinary senile subcapsular cataract may be arrested in 75 to 80 per cent of the cases **when treatment has been instituted in the early stages.**"

This little volume should be of much interest to opthalmologists, general practitioners and students of preventive medicine.

Handbook of Orthopedic Surgery. By Albert Rives Shands, Jr., M. D., Associate Professor of Surgery in Charge of Orthopedic Surgery, Duke University School of Medicine; Chief of the Orthopedic Service, Duke Hospital, Durham, N. C. In colloboration with Richard Beverly Raney, M. D., Instructor in Orthopedic Surgery, Duke University School of Medicine. Pp. 593. 169 illustrations. Price $5.00. Saint Louis: C. V. Mosby Company, 1937.

The reviewer approached the task of reading another text book of orthopedic surgery so soon after the appearance of Mercer's splendid work with some little prejudice against the new-comer.

Shand's work is most admirably exactly what it sets out to be, a handbook for the medical student and the general practitioner. He has treated his subject clearly, simply and comprehensively. It should be on the shelf of every general practitioner whether remote from orthopedic consultation or not.

The reviewer liked particularly the use of tracings rather than the usual poor reproductions of roentgenograms, the frequent use of diagrams and drawings, and in general its whole air of being a book of ready reference in case of need.

The chapters on infantile paralysis, on scoliosis, and on body mechanics were particularly good. The reviewer hopes that in later editions the two chapters on tuberculosis will be rewritten. This was the only weak element in the book. It seems almost as though he were quoting rather than drawing on his own experience.

And the reviewer cannot refrain from asking, in jocular mood, who was the eminent Dr. Bipp whose paste he mentions on page 112—an obvious lapsus pinnae to be corrected in later editions.

Synopsis of Pediatrics. By John Zahorsky, A. B., M. D., R. A. C. P., Professor of Pediatrics and Director of the Department of Pediatrics, Saint Louis University School of Medicine; Pediatrician-in-Chief of the Saint Mary's Group of Hospitals; Fellow of the American Academy of Pediatrics. Assisted by T. S. Zahorsky, B.S., M. D., Instructor in Pediatrics, Saint Louis University School of Medicine; Assistant Pediatrician to the Saint Mary's Group of Hospitals, Saint Louis. Second edition. Pp. 367. Illustrated. Price $4.00. Saint Louis: C. V. Mosby Company, 1937.

Designed principally for students and general practitioners, the second edition of this little volume by Saint Louis' senior pediatrician, readily meets the needs of both. Brief, concise and accurate, it brings with it the practical judgment of an author who has spent almost a half century in the field of pediatrics. For those who require a ready reference and are unable to afford the time for lengthy reading, this book will be of inestimable value.

Medical Morals and Manners. By Hubert A. Royster, M. D., Professor of Surgery, Wake Forest College, Raleigh, North Carolina. Pp. 333. Price $2.50. Chapel Hill: University of North Carolina Press, 1937.

In this volume the author has assembled some of the more important addresses delivered during an active professional career of many years. Scholarly written, the advice in these papers is sound and is borne out in the author's years of distinguished service. The reading of these addresses has been a most delightful recreation to us; the contemplation of the thoughts offered is stimulating.

Memoranda of Toxicology. By Max Trumper, B. S., A. M., Ph. D. 3rd edition. Pp. 304. Price $2.00. Philadelpiha: P. Blakiston's Son and Company, 1937.

This small volume is in it's third edition. The author throughout the book emphasizes ways to reduce the number of cases of poisoning. The various poisons are classified according to Corrosives, Irritants and Neurotics with the latter subdivided. The symptoms, treatment and post-mortem appearances are given. Lethal doses are also named. Tests for the various poisons are given, however not in detail, as this book does not attempt to discuss toxicology from the standpoint of the laboratory. It is an excellent volume and should be in the hands of every practicing physician as a ready reference.

The Intimate Side of a Woman's Life. By Leona W. Chalmers. Pp. 128. Illustrated. Price $1.50. New York: Pioneer Publications, 1937.

This small volume, written by the wife of a physician for the laity, deals with the general subject of feminine cleanliness but discusses the anatomy and physiology of the female pelvic organs, their disorders and marital relations. There is a disposition to credit vaginal discharge with all the blame for womanly ills. The average woman may read this book with profit.

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EARLY DIAGNOSIS OF CANCER OF THE STOMACH*

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The prevalence of gastric carcinoma and the high mortality from this disease amply justify all efforts to refreshen interest in any aspect of the formidable problem that it presents. According to statistics taken from the U. S. Bureau of the Census and published by the American Society for the Control of Cancer, cancer of the stomach and liver accounted for 38,703 deaths in the registration area of the United States during the year 1930. This number was approximately a third of the total of 115,265 deaths from cancer of all organs, and the latter was second only to cardiac disease as a cause of death. Concerning the relative frequency of cancer in different organs, H. Gideon Wells has said: "I think it is safe to assume that cancer of the stomach ranks first, affecting as it does both sexes, and ranking first, so far as I have ever seen, in all autopsy statistics on general hospital populations and in most statistics based on death certificates. Unquestionably, the stomach is the commonest site of cancer in men, and there seems to be no doubt that gastric cancer is more common in men than in women." Especially significant in its bearing on the high mortality from the disease is the fact that in an overwhelming majority of cases gastric cancer is advanced and inoperable when first discovered. Only in a small minority of cases is the diagnosis made when the lesion is in its early stages and resectable with a fair prospect of cure, and almost all such lesions are first disclosed with the roentgen rays. It is clear, then, that the most practicable way to reduce mortality is to require roentgenologic examination of all patients who may have gastric cancer, and the responsibility for thus making possible an early diagnosis rests primarily with the family doctor.

*Read before the meeting of the Arkansas Medical Society, Little Rock, Arkansas, April 12-14, 1937.

Few cancers of the stomach, even those that are extremely small, will escape roentgenoscopic disclosure if the technic is appropriate and thorough, and in most cases a specific diagnosis can be made if the examiner keeps in mind the varying morphology of the disease. Among details of the roentgenoscopic technic, the most important perhaps is adequate exhibtion of the internal relief of the stomach by coating the mucosal surface with a thin layer of the barium mixture at the beginning of the examination. This procedure will disclose minute alterations of the internal topography and small lesions that cannot be discerned after the stomach is filled with the barium suspension. As to the morbid anatomy of cancer, the roentgenologist should avoid the common tendency to think of the disease as being tumefactive only. He should have a keen and constant realization that infiltration and ulceration are also common characteristics of cancer, and that it may manifest itself as a frank tumor, an infiltration, or an ulcer without visible tumefaction.

Thus, early cancers may be classified into four varieties: (1) small tumors without ulceration, (2) infiltrations without deep ulceration, (3) small, ulcerating cancers in which both tumefaction and ulceration are evident, and (4) malignant ulcers in which no tumefaction is apparent.

Small mucoid, or medullary cancers without obvious ulceration are met occasionally but not often. As they have more or less rounded contours and are often pedunculate, they are likely to be mistaken for benign noeplasms. However, the small, medullary cancers usually are single and their contours often present slight irregularities, whereas the henign tumors are often multiple and, as a rule, are smoothly rounded. Nevertheless, polyps which appear both roentgenologically and grossly to be benign, are so often found on microscopic examination to be malignant that it is better to assume that all polypoid growths are either actually or potentially malignant, and to deal with them accordingly.

Small infiltrating scirrhous cancers are difficult to demonstrate, for they do not intrude appreciably into the gastric lumen. Peristalsis may be absent from the affected region and thus assist in discovering the lesion, but peristalsis occasionally persists, notwithstanding. A more trustworthy, constant and fairly characteristic sign of scirrhous cancer is the marked change in the mucosal surface produced by the underlying infiltration; the rugae are effaced and the multiple, small, shallow erosions give rise to a coarsely granular internal relief that is practically diagnostic.

Early cancer of any variety in the upper part of the cardiac segment is likely to elude observation unless this region is given sharp attention. Among the manifestations are delay of the barium in the lower part of the esophagus, division of the barium stream after it enters the stomach, and deformity of the normally regular and symmetrical gas bubble.

Small prepyloric cancers are easily discerned but hard to distinguish from various benign lesions. An early scirrhous cancer in this situation produces an elongated pyloric canal with a funnel-like expansion at the antral end. A similar appearance results from hypertrophy of the pyloric muscle and from early gastric syphilis. However, pyloric hypertrophy has two characteristics that are virtually pathognomonic; almost constantly, it presses into the base of the duodenal bulb, causing a slight invagination and convexity of the bulbar floor and usually a narrow crevice is seen near the middle of the elongated pyloric canal. Syphilis of the stomach undoubtedly occurs, but its incidence is likely to be overestimated. Less than a hundred fairly authentic cases have been recorded at the clinic, and only in a minority of them was histologic proof obtained. I feel, therefore, that waiting for the effects of antisyphilitic therapy in order to distinguish between gastric syphilis and cancer is seldom warranted.

The small ulcerating cancers in which the element of tumefaction is much less pronounced than that of ulceration have often been mistaken, even after excision, for simple ulcers. But at roentgenologic examination the elevated border is visible, under pressure, as a transradiant halo around the barium-filled crater, and a confident diagnosis of cancer can be made.

"Malignant ulcer" is a term applicable to ulcers that, unlike ulcerating cancers, show no microscopic or roentgenoscopic evidence of tumefaction, but on miscropic examination are found to contain cancer cells. Experience has shown that ulcers whose diameter exceeds 2.5 or 3 cm. are almost invariably malignant, and the exceptions are so rare that such large ulcers should be assumed to be malignant. Sometimes smaller ulcers are malignant and their nature may be indicated by irregular form of the niche, effacement of adjacent rugae, absence of antral curling or of gastrospasm, and lack of tenderness of the niche to localized pressure. The situation of an ulcer also has significance as to its probable character; ulcers on the greater curvature are usually malignant, and those on the posterior wall are more likely to be malignant than those in the vicinity of the lesser curvature. Benign prepyloric ulcers often cause spastic, irregular narrowing, not unlike that resulting from scirrhous cancer, and either may be mistaken for the other, but ulcers in this region are so often malignant, regardless of appearance, that the roentgenologic diagnosis should be guarded.

In the majority of cases niche-producing ulcers are benign; the barium-filled niche is homogeneously dense, smoothly hemispherical, has pronounced and radiating rugae about it, is tender to pressure, and is accompanied by various forms of gastrospasm. But these criteria are not absolute, for ulcers that have every appearance of benignancy may prove to be malignant.

Accuracy in the roentgenologic and clinical differential diagnosis of benign and malignant lesions of the stomach is to be encouraged, but marks of distinction are still too often fallible. Underlying all efforts to make the distinction, is a laudable desire to spare the patient the inconvenience of surgical exploration, but sometimes the efforts result in a disservice to him. Besides the duty to avoid unnecessary operation, there is an equal duty to avoid dangerous delay in diagnosis and to give the patient every chance of cure. Approximately two-thirds of all gastric lesions exposed on the operating tables of the clinic are found to be malignant. Every organic disease of the stomach should be considered highly suspicious, and it is safer to assume that it is malignant rather than benign. If a period of observation and medical management seems to be warranted before making a final diagnosis, the decision should not be postponed too long.

On the whole, it seems that the problem is not so much one of making the diagnosis as of having an opportunity to examine patients when the disease is incipient and of examining them thoroughly. It would help vastly to subject to

roentgenologic examination every adult patient who has gastric syptoms, however indefinite and trivial they may be, unless the clinician can affirm positively that they are not due to cancer. Hemorrhage from the alimentary canal, slight or pronounced, frank or concealed, and anemia or loss of weight without assignable cause should be deemed imperative indications for the examination, but in most cases of truly early cancer, symptoms are far less definite than these, and the patient often is not aware of anything amiss. It would help further then to require the roentgenologic test at health examinations of adults, without limiting it to those in the so-called cancer decades of life, for it is now well known that relatively young individuals are not exempt. If the time ever comes when all persons will see, not merely their dentist, but also their doctor, twice a year, a far greater proportion of early cancers will be brought to light.

1. Cancer Mortality Statistics in the United States. Pamphlet issued by the American Society for the Control of Cancer, 1931.
2. Wells, H. G.: The nature and etiology of cancer. Am. Jour. Cancer, 15:1919-1968 (July) 1931.

AMERICAN BOARD OF SURGERY

The American Board of Surgery has been organized to certify general as well as specializing surgeons. It is expected to complete certification facilities for the entire field of surgery since it will be responsible for all surgical specialties not already covered by other boards.

Representatives from three national and four sectional surgical societies comprise the board. Term of membership is six years.

Two groups of candidates are eligible for qualification; those who are already recognized as trained specialists, and those who can demonstrate their surgical fitness in examinations to be conducted by the board. The first of these groups, the Founder's Group, will be chosen on invitation by the board from professors of surgery, members of various surgical associations, and doctors who, for the past fifteen years, have practiced surgery exclusively. Applications for membership in this group must be received not later than January 9, 1939.

Candidates in the examination group must satisfy the following requirements: graduation from an approved American or foreign medical school, one year's general interneship, five years of special training in the study of and/or the practice of surgery, evidence of good moral character. Examinations—written and oral—will be held in as many cities as are necessary to accommodate the number of applicants. Reexaminations will be allowed after a lapse of one year.

The fee for Group A, the Founders Group, is $25; for Group B, $75. No further fees are required once a candidate is qualified.

The first examination is to be held on September 20, 1937. Inquiries about the examination and requests for information and application blanks should be addressed to J. Stewart Rodman, M.D., secretary of the American Board of Surgery, 225 South Fifteenth Street, Philadelphia.

THE UPPER RESPIRATORY AFFECTIONS IN RELATION TO CHRONIC NON-TUBERCULAR PULMONARY DISORDERS*

RAYMOND T. SMITH, M. D.,
Fort Smith

As early as forty-one years ago, namely, 1895, Lichtwitcz pointed out the relationship between lung diseases and chronic sinus infection. A few years later he was joined by Krause. Since that time it has become a well established and accepted fact and many papers written on the subject. This forward step, coming, as it did, before the enucleation of tonsils and the removal of adenoids was recognized as essential to the preservation of good health, proves it to be of signal importance. In America the tonsillotome was clipping its way through the tonsils, making bad matters worse, and in England they were fearful of removing the entire tonsil for fear of fatal consequences. As it has been since the age of bloodletting, the main function of surgery is to establish drainage; whether it be the evil spirits in the blood or pus in an abcess, drainage must be the primary consideration. And so it is in the affections of the upper respiratory tract as well as in the chronic non-tubercular disorders in the lungs.

What do we mean by the upper respiratory affections? Under this heading we must include anything that affects the air passages from the tip of the nose and lips of the mouth to at least the pharynx, or possibly the epiglottis. You will note from the slide that we have a passage which encloses the turbinate and the natural openings to the sinuses in the face, namely, frontal, ethmoidal, sphenoidal and antra. Any condition causing any change whatsoever in the normal state may be classed as an affection. Roughly these upper respiratory affections are grossly grouped as follows:

Rhinitis, covering any affection of the nasal passages.

Tonsilitis, and affection of the faucial or lingual tonsils.

Pharyngitis and laryngitis being used to include any affection of the pharynx or larynx.

With this classification as to location we must also class these conditions in the order of their severity, termination, and complications. Let us mention the simple catarrh, a mild affection which without progression has no real effect on

*Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 13, 1937.

the health of the patient. Next, let us consider the acute exanthemata, which with their sudden onset and severe attacks on the mucous membranes of the nose, mouth, and posterior pharynx, are really serious affairs and must be prevented if we are to avoid damage to the upper respiratory tract.

The idea of our grandmothers that children who had not been exposed to the measles, whooping cough, mumps, etc., should sleep with the others who had contracted these diseases, since they were diseases that all children had and the sooner they had them and recovered, the better; is known now to be a fallacy. If that were not true, the battle for prevention of childhood diseases would not be pushed so vigorously. Compare the invasion of one of these acute infectious diseases such as mumps, measles, chicken pox, small pox, diphtheria, whooping cough, with a flame just merely licking the mucous membrane of the nose, posterior pharynx, and mouth. The damage resulting from these diseases in the most severe forms is sometimes irreparable. These conditions are, therefore, more serious than the simple catarrh. There is a possibility that the structures may return to normal following the onslaught of one of these acute upper respiratory affections, depending, of course, upon the severity and the duration of the attack.

The next exciting causes to be discussed are those factors which in the majority of cases cause permanent damage. In this classification let us mention the smoke of the city and the dust of the country roads. To the city dweller smoke is a more or less constant factor and therefore must be classed as permanent. It is likewise true in the case of our country cousin who inhales the dust from the fields when hoeing or plowing, as well as the cloud raised by his neighbor's automobile. These cannot possibly be avoided, since we continually breathe the air in which these affections travel. At autopsy it is easy to differentiate a lung that has been exposed to the ravages of coal smoke, thereby proving that the damage to the lung is permanent. We should add to these factors the findings in cases of soldiers who had been gassed during the World War. These affections, too, are permanent and must be included with those of the upper respiratory tract since they are breathed in through the nose and mouth and extend their damage along the bronchial tree.

Now let us take up the most universal and common factors which affect our upper air passages. Their terminations also are permanent. Conditions known to the world as common cold and sinus diseases are the most frequent offenders. These are being more and more recognized as the real agents in the producing of the non-tubercular pulmonary disorders. Few of us ever escape in our lifetime one or more colds, even though we may escape sinusitis. While a cold is often mistaken for conditions in the nose such as allergic rhinitis, vasomotor rhinitis, hypertrophic and atrophic rhinitis and even sinus trouble, it is really the basic factor in starting not only the sinusitis but also inflammation of the mucous membrane in the nose and upper air passages and and on by contiguity and continuity to the adenoids, tonsils, larynx, trachea and bronchi. The swelling of the mucous membrane of the nose, with the accompanying blocking of the nasal passages, not only blocks the sinus ostia but abolishes the aeration of the sinuses and allows infective secretion to be taken into the lung. Normal breathing is abolished and the air enters the lung through the mouth and so cannot be warmed by the blood in the nose and cleaned by the cilia. It is therefore irritating air and, as such, starts inflammation in the trachea and bronchi. This inflammation usually subsides with the return of the alkaline reserve and the reopening of the nose and sinuses but the scars never go away. There is left an altered mucous membrane, which, if subjected even to repeated light attacks soon becomes definitely chronic. All of us at one time or another have doubtless seen microscopically sections of tissue taken from the upper air passages and have noted the hypertrophy, the infiltration of polymorphonuclear leucocytes and the invasion and replacement of normal epithelial tissue with fibrous connective tissue. It is also known that this condition extends on down into the bronchial tree with practically the same changes, and so it is regarded as one of the positive causes of chronic non-tubercular lesions of the lungs.

We must not overlook the end results of hay fever and its relation to sinus disease, which, in turn, has a definite relation to pulmonary conditions. I need only to mention the mechanism which differs only slightly from a coryza, because the blocking, swelling and secretion are there, only usually more pronounced. We are not definite in our knowledge of the relation of hay fever to asthma except to say that it is part of an allergic picture and that around 80% of the untreated or non-reactive cases develop asthma. Here we have another chronic pul-

monary non-tuberculous lesion. It is one of the more common major affections of the lungs along with bronchiectasis and tuberculosis.

I am not going to include pulmonary tuberculosis as it is not a descending infection but an ascending one. By that I mean that the infection is, in the greater majority of cases, primarily in the lung. We must include in the mechanical blocking factors, the nasal polypi, which are growths or the outgrowth of a degenerated or diseased sinus lining. It has been noted by many observers that these polypi appear more frequently in allergic individuals. This is logical when one considers the manner in which the sensitive mucous membrane is affected by allergens.

The other common condition in the upper airways is known as sinusitis. As I have stated previously this condition is a direct result of abnormal conditions of blocking, improper aeration and secretion of the nose, and whether caused by colds, gases, smoke, dust, acute exenthemata or allergy, it resolves itself into a problem of improper drainage which justifies the origin of the diseased entity. Once the disease becomes established, it takes only a few weeks to become a chronic focus of infection, which by various and sometimes devious channels sows its seeds of inflammation in distant points, along the most common of which is the lung.

There are many theories as to the mode of transmission, but the ones most commonly accepted by the members of the profession are:

1. Continuity.
2. Contiguity.
3. Aspiration.
4. Lymphatic and blood channels.

The idea that I wish to convey is that the relation of the affections of upper respiratory passages is one of a continuation or addition to an old chronically inflammed mucous membrane caused directly from or by continuation from above.

This premise is borne out by the results obtained in cases of bronchitis, tracheal bronchitis, laryngitis, asthma, and bronchiectasis which were improved or cured when the upper respiratory infection was removed or cleared up. We have all heard of cases of asthma, bronchitis, etc., which cleared up after one or more sinuses were cleaned up. Some men became so enthusiastic that they decided that practically all asthma could be cleared up by radical sinus surgery. The swing now is for more conservative methods for sinus surgery in cases of allergy. It still remains a matter of avoiding inciting factors and desenitization with those allergens we cannot avoid.

I will not attempt to show the relation of these facts in regard to the age of the patient. Anatomically, there is present at birth in a normal baby a nose with turbinates, relatively large antra. This is borne out by the slide which shows the paranasal (accessory) sinus in a child aged sixteen months. We see in this slide that there is present not only a maxillary sinus but also a sphenoid sinus along with the ethmoidal infundibulum. In the next slide we note the relative size of the antrum in a child from sixteen to eighteen months. A newborn infant is supposed to inherit from the mother an immunity from all diseases for approximately a six weeks period. After that even in so-called normal infants it is easy to find in a large percentage colds at least and up until three or four years of age the incidences of bronchial pneumonia are fairly common. Many children with a chronic cough, who are underweight, sallow, easily tired, and along with these, the children who do no better even after a complete tonsillectomy and adenectomy are potential candidates for non-tuberculous lesions in the lung.

Bronchiectasis is usually classed as a child disease and undoubtedly appears as a result of these neglected colds, sinus affections, and bronchitis. In the past bronchiectasis in children has either been overlooked or called tuberculosis. This is confirmed by the history we obtain from adults which reveals that for a great many years there has been either a postnasal discharge, a chronic cough or frequent colds. So it would appear that the age in these conditions worked in a definite ration proportionate to the number of attacks and their severity.

The relation of these conditions as to course may, in my opinion, be divided into three stages.

1. **The acute onset of the affection in the upper air passages.** This may be mild or severe and may be treated, or, as is usually the case, neglected. This is the main point at which greater attention must be paid to the prevention of the onset, or at least to the extension of its damage. This is where the greatest good can be accomplished.

This period is the shortest of all and good judgment must be exercised. I will admit that this will be quite difficult since we are dealing with parents and young children but it is more

than worth the effort. Much more attention must be paid to this stage.

1. **The semi-quiescent stage.** In this stage which lasts much longer than the first stage, the condition in the upper respiratory passages has become chronic, and since it usually causes the patient no acute pain, it is forgotten and not often referred to in the subsequent histories unless there is nothing left and we decide to take a chance look at the sinus. That is to say, at least we used to be that way, but now since it has been repeatedly proven in the majority of cases of lung disease that the upper air passages are also involved, we have awakened to the fact that if the condition in the upper respiratory confines is recognized there is a possibility that the third period can be markedly shortened. This is the period when by one of at least four ways the bronchial tree and the lung proper become involved. This process continues insidiously. This is the period of lowered resistance and loss of weight and constant irritability, despondency, fear and oftentimes mistaken diagnosis.

3. **The chronic non-tubercular pulmonary disorders.** This is concerned chiefly with asthma, chronic bronchiectasis, purulent bronchitis and lung abcess. This is called the terminal stage because the patient usually carries this condition to death. It is true that some cases can be helped but the majority are so far involved that it is usually hopeless. The patient presents a pitiful appearance with a chronic cough and a slight elevation of temperature, night sweats, loss of weight and strength, and is usually very despondent. These are the cases that usually get a cough mixture or some drops for the nose and are advised to go to a sanatorium.

At this point I wish to bring to your attention a method to be used as an aid in the differential diagnosis of non-tubercular pulmonary disorders, which will also offer us much more definite information as to the prognosis of these conditions. I refer to the direct vision bronchoscopic examination of the bronchial tree and lungs.

In establishing the diagnosis of any non-tubercular lung condition the internist can tap and listen on the outside. The roentgenologist can look through the patient, but it is up to the endoscopist to look into the lung and see with his own naked eye lesions from which he is able to remove specimens of tissue and uncontaminated secretions. It bears the same relation to thoracic surgery and internal medicine as does the cystoscopic examination to the urological surgeon. Let us not overlook the fact that both sounds or lack of sounds, along with densities and shadows are often misleading. It is important that we get more direct vision diagnoses if we wish to alter the prognosis in chronic non-tubercular pulmonary disorders.

This paper is read in the hope that it will stimulate interest in a closer cooperation of the different branches of medicine to insure a safer, surer method of diagnosis and prevention of the chronic disorders of the non-tubercular type in the lung.

And now, in closing, let me sum up the salient points:

1. That the relation of upper respiratory affections to chronic non-specific lesions in the lungs has been recognized at least forty years.

2. That the most good results from the prevention and active treatment of the acute onset of the affections in the upper respiratory tract.

3. That parents be educated in the necessity of prompt and lasting cooperation as regards the management of affections of the upper air ways.

4. That we remember in obscure cases of lung disease as regards differential diagnosis and prognosis we should rely more and more on the accuracy of the direct vision method.

WISCONSIN DEFEATS HEALTH INSURANCE

An encouraging sign is the decisive defeat in the Wisconsin House of the voluntary health insurance bill by a vote of 60 to 24. This was by far the most serious attempt to date to actually legislate socialized medicine into existence. The bill provided for medical cooperatives to employ physicians on a contract basis, and pay for medical service and hospitalization on a contract fee basis. Of particular interest to organized medicine was the provision to prevent disciplinary measures by the state medical society of such of its members as might participate in the plan. Interests favoring the measure were numerous and varied. The sole opponent to the bill during the hearing was Secretary George Crownhart of the state society and his presentation in behalf of his organization was no doubt a decided influence in the defeat of the bill. The medical profession of the country is grateful to the Wisconsin State Medical Society and its able executive secretary for their successful fight against adoption of this, no doubt the first similar legislative assaults upon the private practice of medicine.

MANAGEMENT OF ABORTION*

ERNEST HARL WHITE, M. D.,
Little Rock

Two phases of abortion will be considered in this presentation, namely, abortions occurring prior to the twelfth week of pregnancy, and those occurring between the twelfth and twenty-eighth week of gestation.

Abortion is generally considered under these heads: threatened or inevitable abortion, infected or non-infected cases. In abortions under the 12th week of gestation, the ovisac is not very firmly attached to the uterine musculature; in fact during the 1st six weeks the ovisac is loosely attached to uterine mucosa by decidual layer of cells. The ovisac has villi surrounding the whole of it up to the 6th or 17th week. Then the villi on the ovisac near the uterine cavity begin to atrophy because of lack of nourishment and this portion is known as the membranes; that portion of the ovisac toward the uterine wall gets more nourishment. The villi grow more rapidly and both the floating and fastening villi become well developed. This area was known as the placenta or cotyledon area of the placenta. These fastening villi are firmly attached deep into the decidual layer by the twelfth week. It is through this loose attachment of the ovisac that abortions occur more frequently and readily in the first trimester of pregnancy. Abortions at this period are usually a one stage type unless criminal, or self-induced, abortion was attempted. In such cases one may have the two stage type, i.e. perforation of the sac, a casting off of the foetus and then later, the placenta. In considering abortion in this first period, one should secure a concise clinical history. Then a bispeculum examination, together with a rectal or a sterile glove vaginal examination should be performed. Vaginal examination necessitates an aseptic technique. From the history and clinical findings one is justified in formulating his outline of treatment.

If threatened abortion is your diagnosis, then I think we will agree as to treatment. Rest in bed, narcotics of some kind, and sedatives to reduce nervousness and no visitors. On the other hand, one may secure a history of severe backache, bleeding of bright red blood, more clots than in her normal menstrual period. Vaginal examination with sterile glove adds materially to the clinical symptoms in one's interpretation of the condition. One frequently finds cervix soft. One finger may be admitted and foetal material may be felt protruding from the uterine cavity into the cervical canal. In some cases one may find the external osis closed and the internal and upper cervical canal dilated, in other words, funnel-shaped. While this is good evidence that abortion is in progress, one may be justified in watching for more definite information. When inevitable abortion is known, one is justified in stimulating uterine contraction by the use of small doses of quinine and of ergotrate. Ice caps to abdomen aid uterine contractions. If the uterus appears to have passed foetal parts, and there is a possibility of material remaining behind, the use of ice caps, ergotrate or quinine will increase the colicy pains and the backache. Often one can feel the wave-like contractions of the uterus. If no material is left behind the uterus will be firmly contracted, but the backache and cramp-like pains will not be increased. Bleeding will stop shortly, and the tinged bloody discharge will decrease from day to day. During the first twelve weeks the uterus will generally empty itself without assistance, but in case foetal parts are felt, I feel one is justified in removing the material with a ring or placental forceps, wiping out uterine cavity with iodine, iodoform or sterile gauze. If there is no bleeding or very little bleeding, I would leave the uterine cavity empty, but if bleeding, pack uterus with sterile gauze, removing within 10 to 12 hours. Often one sees many small fragments come away in the meshes of the gauze. In this period no curette is used.

In general, I feel that in home work intrauterine manifulation should be reduced to the minimum. Loose fragments can be removed by sponge forceps, and with too profuse bleeding, iodine or iodoform gauze may be packed into uterine cavity and removed in 10 to 12 hours. In infected cases one is justified in removing all loose fragments with a sponge forcep. Do no forceful dilation of the cervix. If material remains in the closed uterus, stimulate uterine contraction by the use of quinine, ergotrate and ice caps. Light dilation may be permitted for drainage. Good drainage from the uterus is demanded to reduce infection.

Abortions between the twelfth and the twenty-eighth week usually are of the two stage type. Rupture of the sac, expulsion of liquor amnion and the foetus, are later followed by the placenta. Frequently the placenta is so well attached that two or three days must elapse for necrosis of the decidual layer and the fasten-

*Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 14, 1937.

ing villi to take place and then the placenta comes away. However, during this time stimulate the uterine contraction by use of ergotrate and ice caps to abdomen. Here again loose bits of fragments, placental parts, should be removed by sponge forceps. Packing the uterus aids frequently in the expulsion of uterine contents. In this stage no curette is used. Infected cases in this period should be treated for infection with no manipulation except the removal of loose fragments in the uterus. Transfusions, ice caps to abdomen, ergot, quinine and pituiturin should medically empty the uterus. After the temperature has become normal in from 4-6 days, the uterus may be emptied by use of dressing forceps and packing. After the 28th week abortion or miscarriage takes the same course as normal delivery, i. e., baby first, followed by the placenta. The placenta is seldom slow in detaching itself in the last trimester.

SO THEY SAY

. . . . "It is lamentable that the physicians of the United States, who constitute the most highly educated professional group of any country, fail so miserably in the exercise of citizenship. James Bryce listed as hindrances to citizenship 'indolence, private self interest, and party spirit.' Inflexible party spirit, which sees no virtue in those who have other affiliations, is essentially obstructive. Private self interest, which denies any generous inquiry into the reasonableness of other people's thinking, shuts the door in the face of progress. Indolence, disinterest, disinclination to help oneself, and avoidance of responsibility, failure to support those who are striving for the common good, are hindrances to citizenship. Membership in the medical profession does not excuse any failure to function in the social or community life of the nation." . . .
—(From "You Are the Policy Makers" by N. B. Van Etten, M. D., in the Milwaukee Medical Times, July, 1936.)

Government in many respects is like the science of medicine—"it is still in the atmosphere of an opinion." Each and every medical society member as a citizen should be a part of our governmental "atmosphere." How? By voting and by passing on constructive advice to local, state and federal officers. Be more than a critical friend of Democracy!—Detroit Medical News.

INFANTILE PARALYSIS IN ARKANSAS

W. VERNON NEWMAN, M. D.
Little Rock

The public is becoming more alarmed each day as the newspapers headline the new cases of infantile paralysis in Arkansas, with special reference to LittLe Rock. Naturally, people turn to their physicians with innumerable questions. As physicians, we must be in a position to answer such questions. This is necessary to quiet unnecessary alarm without, however, leaving a false sense of security.

During the summer and fall of 1936 and to July 17, 1937, there has been a decided increase in the number of cases of infantile paralysis reported throughout the lower Mississippi Valley. Although the disease is not expected to reach epidemic proportions until 1938, the decided increase in reported cases is sufficient to make all physicians who are infantile paralysis-minded to put forth every possible effort to prevent further spread of the disease. It is felt therefore, that a discussion of the problem of infantile paralysis coming at this time when there is a general concern may be of benefit to physicians of Arkansas.

Infantile paralysis is a hot weather disease. The greatest number of cases occur during July and August, only to die out with cold weather. There is a greater number of cases among males than females. The age limit varies, however, about eighty-five per cent of the cases occurring during epidemics are under ten years of age. This does not mean that adults are immune or that they may not be carriers but suggests the fact that during their childhood they have had the disease in an abortive and unrecognized form and in this way have gained inmmunity.

The mode of transmission is not definitely established. Three types of carriers are recognized: (1) Those who are suffering from the disease in mild form, (2) Healthy persons who have been in contact with patients suffering from the disease, and (3) Chronic carriers who have recovered from an attack. In support of the carrier problem, it is of interest to note that during the past six weeks, physicians have been called to see innumerable patients suffering with mild colds and sore throats with associated headache, pain in the muscles of the legs and back, and gastrointestinal upsets. These cases have been interpreted as "summer colds" and "summer diarrhea." The possibility that these cases are abor-

tive poliomyelitis should be considered strongly and isolated as possible carriers.

The question of prophylaxis is even more difficult to answer. Until further evidence is presented, and must consider the disease communicable and proceed along lines already established for communicable diseases. Avoid all crowds. Isolate all cases of so called "summer colds" and "summer diarrhea." Summer camps have been in progress for at least two weeks should be allowed to continue but no new members should be permitted to join the original camp without first spending two weeks in an isolated camp which has continued for two weeks without new additions and no new cases.

Prophylactic sprays have received considerable newspaper publicity and as a result, the laymen have unwisely started using them without the advice of their physicians. A review of the literature convinces me that men who have used this means of prevention are in no way pleased with the results. Certainly, to be effective they must be expertly administered. Secondly, the drugs advocated are powerful irritants which tend to destroy the natural protective properties of the nasal passage. Third, the use of such sprays leaves the layman with a false sense of security and a feeling of freedom to take many undue risks. It must be remembered that many authorities consider the gastro-intestinal tract as a second portal of entry, hence, protection from entry of the infecting organism via the olfactory tract, even if it were 100 per cent effective, may be considered only fifty per cent. Further, we must remember that even in expert hands the sprays advocated produce a violent headche, and burning sensation for several hours, with other more violent reactions which space does not permit to tabulate. Pediatricians tell us that sinusitis in children has been greatly increased in the past few years and contribute much of this to the use of nasal irritants.

The disease itself progresses in four stages, however, any one of these stages may be omitted. The first or prodomal stage is characterized by sore throat, usually, mild, pain in the lumbar muscles, or a generalized muscle soreness, frontal headache, loss of appetite, sometimes abdominal pain with either constipation or diarrhea, and a temperature usually not higher than 102 degrees. This stage lasts for a period of two to four days usually with an increase in the severity of the symptoms and a desire of the patient to keep the neck hyperextended. The facial expression is often that of extreme fear adequately described as the hunted animal expression. Profuse sweating, fine tremors, muscle twitching, and convulsions have been described and considered of great diagnostic value. The disease may terminate with the above listed symptoms. Such is considered an abortive case. Ninety-five per cent of cases are considered to end in this stage.

The remaining five per cent of cases proceed to the second or paralytic stage. Obviously, with the development of paralysis the diagnosis is complete. Paralysis develops rapidly and involves groups of muscles rather than single muscles. The parts of the body involved vary but the lower extremities are most frequent affected. Paralysis here is flaccid and may stop with one group of muscles or progress to total involvement of all muscles. In some cases the paralysis begins high, involving the cranial nerves first, and later the muscles of the spine, extremities, abdomen, and respiration. Death as a rule follows paralysis of the muscles of respiration. Once paralysis is complete the patient tends to improve. Systematic symptoms disappear, weakness and painful muscles persist for several weeks to months and the patient then passes into the third stage or that of convalescence. During this period, which lasts for two years, partial to complete recovery from the paralysis is expected.

The fourth or chronic stage is that from two years to life in which the patient is left with varying types of paralysis which are not improved without surgical intervention.

Helpful findings are sluggish to absent reflexes. Occasionally the reflexes may be hyperactive. The blood count varies from a leucopenia to a slight leucocytosis. Probably the most beneficial laboratory procedure is obstained from the spinal fluid, which is under increased pressure and has a ground glass appearance. The cell count varies from 10 to 2500 cells. The fluid often forms a flaky clot and globulin is present.

Treatment of infantile paralysis is variable, however, certain procedures are essential. Paramount is rest. These patients do not tolerate hospitals. Isolation at home with absolute bed rest is recommended. Large quantities of fluids, food and mild measures to insure proper elimination are quite essential. Symptomatic treatment completes the general care. It is essential that the muscles be kept in a neutral position of rest and relaxation. With the onset of paralysis the extremities become cold and cyanotic and should be kept warm, preferably by wrapping in cotton or muslin. After the acute symp-

toms subside, the paralyzed parts should be placed at complete rest and this is done most effectively with plaster casts. Rest in plaster casts should be continued until all muscle soreness disappears and then the casts bivalved for daily graduated exercises under water, and light massage. Exercises and massage should be instituted under direction of selected physiotherapists or physicians familiar with their value and dangers if optimum return of function and power are to be obtained and deformity to be kept at a minimum.

The value of drugs and serums in combating infantile paralysis has not been definitely established. To date, the most effective weapon is pooled convalescent serum which, becasue of its limited quantity, cannot be used as a prophylactic, and to be effective must be administered before the onset of paralysis. In the absence of and in conjunction with convalescent serum, repeated small blood transfusions are very valuable. To those who adhere to the belief that the streptococcus is the causative organism sulfanilamade may be tried. The result is the few cases in which I have seen this drug used is discouraging.

As this article is concluded and rushed to press, the author hopes that the impression of an impending epidemic is not conveyed. In advising the public as to what to do, self-inflicted quarantine has stood the test of time. As to treatment, new and unproven drugs may be tried with extreme caution, provided, the physician does not lose sight of the fundamental principles of medicine.

A PROGRAM FOR MEDICAL CARE OF RESETTLEMENT ADMINISTRATION CLIENTS IN ARKANSAS

The activities of the Rural Resettlement Administration in Arkansas continue to grow. The policy of this bureau is apparently firmly fixed toward obtaining medical services by contract and at a lower level than the usual average fee paid in the respective localities. Some county societies of Arkansas have approved the plan as submitted to them; others have expressed definite opposition. In order that the component county societies may have the benefit of the procedure as is employed in other states, the adopted program of the Indiana State Medical Association is published. Inquiries, and in particular, the experiences of county societies in this work to date will be appreciated in the state secretary's office.

I. (a) That the county medical societies recommend to the physicians in their counties that they furnish to the Resettlement Administration clients and their families the services usually rendered by a family physician at such fees as the families are able to pay. This service is to consist of home and office care, including obstetrics and ordinary drugs. It will not include major operations or hospitalization.

(b) A specified maximum fee for all surgical operations shall be agreed to by representatives of the Resettlement Administration and each county medical society.

II. The Indiana State Medical Association will recommend:

(a) To the county medical societies that urge the physicians of their counties to cooperate with the Resettlement Administration in the matter of providing medical care for their clients.

(b) That all questions concerning bills for medical services rendered under any program that is drawn up with the Resettlement Administrathion be referred to a committee of the local county medical society. If this committee cannot come to an agreement in regard to these bills and all parties concerned, the questions will then be referred to the Executive Committee of the Indiana State Medical Association.

(c) That the county medical society work with the county rural rehabilitation supervisor and advise him of the physicians who have agreed to participate in this program.

III. The Resettlement Administration will:

(a) Have a representative, the local rural rehabilitation supervisor, meet with the officers of the county medical society and advise them who are resettlement administration clients in the county.

(b) The county rural rehabilitation supervisor will advise the clients of the names of physicians who are willing to cooperate. The client will select the physician of his choice. The county rural rehabilitation supervisor will then give the client a memorandum for the physician showing that he is a client of the resettlement administration. The client and the physician will then work out an agreement.

(c) 1. The county rural rehabilitation supervisor will take an application for loans for the payment of the fee agreed upon. If the loan is approved, the supervisor will advise the physician. These funds will be made available for payment at such intervals as may be deemed advisable; payments to be made after the services have been rendered.

2. The rural rehabilitation supervisor will endeavor to secure funds either through grants or loans to take care of emergency surgical cases.

(d) The representatives of the Resettlement Administration, with work with the Indiana State Medical Association in this program, it being thoroughly understood by the Resettlement Administration representatives that such a program will be made available only to those low-income farm families that are the responsibility of the Resettlement Administration.

COMING MEDICAL MEETINGS.

Kansas City Southwest Clinical Society, Kansas City, October 5-8th.

Southern Medical Association, New Orleans, November 30-December 3, 1937.

American Medical Association, San Francisco, June 13-17, 1938.

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

EDITORIAL

SENATOR LEWIS' TALK

Probably the most widely discussed of the proceedings of the House of Delegates at the recent Atlantic City session of the American Medical Association is the talk made by Senator J. Hamilton Lewis to that body. Medical opinion varies as to significance of his remarks which created some very natural consternation among the delegates. If the Senator appeared as the official representative of President Roosevelt, the President was quick to deny it in the press. There are some who feel that the Senator misconstrued the greetings which the President sent to the American Medical Association. This message of the President's was said by Senator Lewis to be: "He said that I was authorized to say to you that he knew something of your meeting and that he had been for some time observing the course of the doctors, necessarily meaning that he was not far removed from constantly keeping up with the features of the profession, and that he wished you success as to your undertaking. If I use his exact words, he hoped that you would find a way to cooperate with him in such methods as you would jointly find would be to the service of the helpless and the afflicted, within such province as you felt the government should undertake."

While there are some who felt that the Senator had sung the swan song for the medical profession, there are others who feel that if such laws as were suggested are actually in the making, there is yet ample time for vigorous intervention by the profession.

The Journal suggests that every physician in Arkansas read Senator Lewis' address in its entirety as published in The Journal of the American Medical Association. Certain highlights of the address are presented here.

"I beg to say to you that you have reached a point where the change in all government must attract your attention. * * * The question for you, doctors, is not whether you like it or don't. The question for you is: 'What is to be done about it?' * * * You are going to have a certain set of individuals, thoughtless from my point of view, who are shortly going to demand of you that there be a system of examination and application by the Federal Government upon every doctor in America to prove his right to be admitted to practice under Federal law, in addition to that which he is now enjoying under his local laws. * * * And then we will come about

to the thing which I am utterly against and wholly abhor but which I tell you is on its way—the designation of a certain class of doctors named by the President, or by some officers of the Federal Government, who then become a board who are to pass upon their fellow doctors having the right to be admitted to be a practitioner under the Federal Law. * * * My dear comrades, not only do I mean there is such a prospect, I mean to come here today and tell you it is on you, and you have got to pause to consider it, and I have come to ask your advice. I helped draw the provision that relates to the doctor. I have been one of those who advocated that you doctors take into your hands the system by which the poor would be cared for. * * * I am compelled to tell you that government is on its way of saying to you, 'Hold up here, Doctor: we are not asking you to do anything about a patient. We know nothing about a patient, don't recognize his existence; it is your creation. We recognize an instrument called 'citizen,' who is essential to the welfare of government. You have professed to be able to help him carry on his life. We need his life for usefulness in civil affairs, and in military affairs for the defense of his nation, and now since you assume to take care of the mother of that child that is to come forth, and of the mother herself * * * and the father * * * we are compelled to tell you that we have got to treat you as an officer of the Federal Government, and turn you into being such! * * * I say it is nothing less than absurd for men to come around you and say, 'This is an invasion, it ought to be resisted, it ought not to be adopted!' * * * It may be you are right, but it is the policy that seems to possess mankind in his advances all over the world * * * I want the position wholly changed. Instead of government taking charge of directing the doctor as to what is to be done in matters where his science is of first application, I want the government to place the doctor in a position where he can direct the government."

The House of Delegates referred the subject matter of Senator Lewis' speech with the Board of Trustees. Organized medicine in America may well be confident that the Board of Trustees will adopt a course of action which will maintain the high tradition of American medicine. It is certain that no action looking toward the socialization of medicine will be adopted. The rendering of a high standard of medical service with due regard for medical ethics remains the responsibility of the individual physician. Let us see that we as Arkansas physicians do our part.

THE EDITOR TALKS WITH THE MEMBERS

The Journal was established to record the proceedings, publish the scientific papers and, in general, to serve as a medium for the interchange of information to the membership of the Arkansas Medical Society. As we review its past volumes we are impressed with the improvement in the character of the scientific discussions which appear in its columns. A majority of these are better than average papers: indeed, a number have been reprinted or abstracted at length in other medical publications.

As we see it, The Journal has another duty to perform. It should present from month to month a perspective of the practice of medicine in Arkansas, mentioning the personal side of practice, the doings of our colleagues, their achievements, the more or less intimate side of their lives, that phase of their careers not connected with the actual practice of their profession. Arkansas physicians are more than usually active in the social and civic affairs of their respective communities. We hold to the belief that mention of these accomplishments is of interest to the general membership. In its efforts to make mention of these personal items, The Journal feels that it has not had the cordial cooperation of the membership. Whenever possible, mention has been made of all such incidents in the lives of our members. With a more cordial response by our readers, the scope of the personals and news items section of The Journal could be materially increased. If you are interested in the activities of your colleagues, you can help The Journal by sending in such items of news as may come to your attention. The Journal feels that it is false modesty which prevents you from letting it take proper notice of your attainments. May we have your cooperation?

OBITUARY

WILLIAM A. CLARK, aged 68, died at his home in Bald Knob July 8th. A graduate of the Saint Louis College of Physicians and Surgeons in 1892, he had practiced medicine in Bald Knob continuously to the date of his death. He was president of the White County Medical Society in 1932. Surviving relatives are his wife, a son, two brothers and five sisters.

PROCEEDINGS OF SOCIETIES

The annual picnic of the Benton and Washington county medical societies was held at Cave Springs July 8th with a large attendance of physicians and their wives.

The Ouachita County Medical Society met in regular monthly session July 1st, at the Camden Hospital in Camden. After a delightful meal served by the nurses of the hospital the following program was rendered: "Obesity," Dr. Alvin W. Strauss, Little Rock; and "Summer Diarrheas," Dr. A. C. Kirby, Little Rock.

R. B. Robins, Secretary.

Members of the Arkansas Medical Society residing in the counties of Clark, Garland, Hot Springs, Montgomery and Saline are cordially invited to attend a meeting for the purpose of reorganization of the Seventh Councilor District Medical Society to be held at the Courthouse, Malvern, Arkansas, August 10th at 4:00 p. m. This will be a dinner meeting.

The Randolph-Lawrence County Medical Society met at Hardy July 13th with Drs. Wm. Johnston, W. W. Brown and W. O. Tibbels as hosts to the assembly. The meeting was in the park of the Rose Hill Hotel; a cool place on a summer day. Sixteen members and thirteen visiting physicians, their wives, daughters, or friends; there were as many, or more, ladies than gentlemen; making a total of more than sixty present. The meeting was one of the best ever. With Doctor Henderson in the chair, the meeting moved on smoothly from the word go. The scientific program was worthy of a state or national session, and withal so practical that each and every physician heard something that he needs in his every day work. F. Walter Carruthers, Little Rock, discussed "Fractures of the Forearm, Wrist and Elbow," demonstrating splints used in his daily work. T. L. Evans, Batesville, discussed "Purpura." H. A. Stroud, Jonesboro, discussed "Hypertension. Wm. Johnston, Hardy, and H. B. Hull, Mammoth Spring, presented two clinical cases of heart conditions, that fitted in the discussion of hypertension very nicely. Then came the social hour, and the hosts proved themselves equal to this occasion as well. They took us down to a shady nook on the bank of the river, and served us with an abundance of chicken dinner trimmed all around with roasting ears on the cob, slaw, relishes, lemonade and iced tea. Yes, these Sharp County Doctors do the job of entertaining nicely. Members present Dr. and Mrs. J. W. Ryburn of Pocahontas; Dr. and Mrs. H. B. Hull, Dr. and Mrs. Mitchell Blaine, of Mammoth Spring; Dr. and Mrs. Wm. Johnston, Dr. and Mrs. W. W. Brown, of Hardy; Dr. and Mrs. W. O. Tibbels, of Evening Shade; Dr. and Mrs. C. C. Ball and son of Ravenden; Dr. and Mrs. W. W. Hatcher, Dr. A. G. Henderson and Miss Jamie Mullen, of Imboden; Dr. and Mrs. T. C. Guthrie and son, of Smithville; Dr. W. S. Kendall, of Strawberry; Dr. John Hardaway, of Lynn; Dr. and Mrs. J. C. Hughes and Dr. Max Hughes, of Hoxie; Dr. and Mrs. J. L. Merrell, Dr. and Mrs. J. C. Land, of Walnut Ridge; Dr. and Mrs. W. J. Robinson of Portia; Dr. and Mrs. E. J. Cruse, Dr. and Mrs. Chas. D. Tibbels and son, of Black Rock.

Visitors: Dr. F. Walter Carruthers, of Little Rock; Dr. J. B. Elders, County Physician, of Walnut Ridge, Dr. and Mrs. H. A. Stroud and daughter, Miss Sarah, of Jonesboro; Dr. and Mrs. T. L. Evans, Dr. and Mrs. O. J. T. Johnston, Dr. and Mrs. F. A. Gray and daughter, and Dr. and Mrs. C. G. Hinkle, all of Batesville; Dr. and Mrs. I. M. Huskey, of Cave City; Dr. and Mrs. J. D. Smith and daughter, of Violet Hill; Dr. and Mrs. J. H. Smith, of Oxford; Dr. and Mrs. E. A. Baxter, of Melbourne; Dr. L. E. Reeves, of Monette; Mr. and Mrs. Wm. Johnston, Jr., and son, of Hardy, and Mr. and Mrs. John W. Tibbels, of Ranger, Texas; and other friends of the hosts whose names we did not get.

Chas. D. Tibbels, Secretary.

The Pope-Yell County Medical Society met in dinner session at St. Mary's Hospital in Russellville July 15th for the following program: "Common Diseases of the Eye," L. Gardner, and "Advantages and Disadvantages of the Use of Prontosil," Roy Millard.

At a meeting of the Hot Spring County Medical Society held in Malvern it was voted to organize the Seventh Councillor District Medical Society and a call was issued for a meeting to be held at the courthouse in Malvern at 4:00 p. m., August 10th.

PERSONALS AND NEWS ITEMS

L. H. McDaniel, Tyronza, has been elected commander of the fifth district, American Legion.

T. A. Peterson has been elected vice-president of the Wynne Lions Club.

A. B. Robertson has been appointed health officer at Rison.

J. L. Merrell, Walnut Ridge, has been re-elected commander of the fourth district, American Legion.

The Estelle Hospital, operated by J. T. Matthews at Heber Springs, is a new admission to the approved list of the Council on Medical Education and Hospitals of the American Medical Association.

Fount Richardson, Fayetteville; Raymond Cook, Little Rock, and J. C. Ogden, Fort Smith, are taking postgraduate work in Europe during the summer months.

E. E. Estes has been elected a director of the Fordyce Country Club.

A. M. Washburn, formerly of Blytheville, has completed the public health course at Harvard University and has joined the staff of the State Board of Health as Director of the Division on Communicable Disease Control.

Doyle Fulmer has completed a public health course at Harvard University and has been assigned to the State Board of Health as Director of the Department of Malaria Control.

Robert A. Milliken, Little Rock, has been appointed Director of the Crippled Childrens' Division of the Department of Public Welfare.

R. H. Willett, Jonesboro, won the July 4th flag tournament at the Jonesboro Country Club.

John H. Wilson has been appointed resident surgeon at Dyess Colony.

G. S. Atkinson and W. P. Hutchins have moved into new offices at Manila.

"What the General Practitioner Should Know About the Ears," by M. V. Russell, El Dorado, appeared in the June Tri-State Medical Journal.

Drs. Ulys and Loyd Jackson have established the Jackson Clinic at Harrison with office and hospital rooms.

S. A. Thompson has been elected vice-president of the Camden Lions Club.

Frank Vinsonhaler, Little Rock, spent a June vacation in New York state.

F. O. Rogers, Little Rock, spent a June vacation in North Carolina.

H. King Wade, Hot Springs National Park, recently addressed Arkansas Medical, Dental and Pharmaceutical Association.

"The Cervix in Parturition," by J. P. Clemens," Mount Holly, appeared in the Medical Record for July 7, 1937.

D. A. Rhinehart, Little Rock, presented "Nickels, Dimes and Quarters" before the American Society of x-ray Technicians at Denver in July.

THE FRANKLIN COUNTY CORRESPONDENT

June 23, 1937.

The June number of the Journal of the Arkansas Medical Society is a notable number. I see I got mentioned several times. If you have a spare copy please send me one.

I note also that I got mentioned in the Arkansas news of the Journal of the A. M. A. of June 12th. I wonder who supplied that note? It contained an error as I was secretary throughout 1922. The note says that Dr. Blackburn was secretary in 1922. He was not as shown by minutes of that year. There has been no break in my service as secretary of the Franklin County Medical Society.

The Franklin County Medical Society met on the regular date, June 8th, in front of Burns Drug Store with the president and secretary only attending. We were conservative in our remarks but considerably less so in our thinking about the absent members. We did wish we had known in time and pulled out to Fort Smith, for the Sebastian County meeting.

Further about the June Arkansas Medical Journal: Fine picture of our good-looking president and an excellent article by Wolferman on tuberculosis sputum.

Yours very truly,

Thos. Douglass.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

The Auxiliary to the Ninth Councillor District Medical Society met in Hotel Seville, Harrison, June 1st, 1937. The business session opened with the president, Mrs. Loyd Jackson in the chair.

Roll call was answered by ten members: Mesdames D. L. Owens, O. B. McCoy, Ulys Jackson, Loyd Jackson, J. G. Gladden, J. H. Fowler, (Harrison), J. I. Thompson, L. M. Weast, A. V. Adams, (Yellville), and D. K. McCurry (Green Forest). One new member, Mrs. A. V. Adams (Yellville), was added to the list, making a total of eleven members, and one guest was present, Mrs. Geo. F. Jackson, Little Rock.

The usual business formalities were carried out. The president appointed a program committee for the December meeting composed of: Mrs. Ulys Jackson, Harrison; Mrs. A. V. Adams, Yellville; and Mrs. D. K. McCurry, Green Forest. Each member promised to be responsible for the sale of one Hygeia for the year.

The program consisted of reports on the state convention at Little Rock: "Activities of April 12th," Mrs. Gladden; "Memorial Session," Mrs. McCurry; "Banquet and General Entertainment," Mrs. Jackson. For special entertainment a program committee composed of Mrs. Henry Kirby, Mrs. D. L. Owens and Mrs. O. B. McCoy presented the following:

Piano solo—Oeida Bell Jackson.
Butterfly dance—Ruth Martin.
Talk, "Psychology"—Mrs. Foster.
Acrobatic dance—May Glass.
Piano solo, "Trees"—Mrs. Dan Anderson.
Vocal solo—Mrs. Otis Peeples.

During the program, at a table beautifully decorated with fern and blue summer flowers, Mrs. Ulys Jackson presided at the punch bowl.

Banquet in Seville Hotel at 7 p. m. was served jointly to the Medical Society and Auxiliary.

Mrs. D. K. McCurry, Publicity Chairman.

Dear Auxiliary Members: ———

After a vacation trip to Indianapolis to the automobile races, three days in beautiful Washington, D. C., a day in Philadelphia visiting the many historical points of interest and five days in Atlantic City at the American Medical Association and a drive home through the Shenendoah and Blue Ridge Mountains, it is really hard to settle down to a quiet summer at home. But I brought back so many memories from the trip and especially from the National Auxiliary meeting and contacts made there that it will be something for me to treasure and enjoy for many summers to come. And I just must take this opportunity to thank the Auxiliary Members of our state for making me your representative at this great meeting.

Arkansas was also represented by Mrs. J. T. McClain of Gurdon, delegate, who read her report of work done last year; Mrs. Decker Smith of Texarkana, delegate; and Mrs. William Hibbitts, of Texarkana, National Historian last year. Our State Auxiliary has again been honored by National in that Mrs. Hibbitts was elected fourth vice-president for the year 1937-38, and I am sure that you all join me in congratulating her and wishing her much success.

The hostess auxiliaries, with Mrs. Carl A. Surran as general chairman, certainly spent every effort to see that the guests were entertained at all times. Dinners, luncheons, breakfasts, teas, entertainment at the Steel Pier, fashion show, the President's dinner and reception and others added much of color and enjoyment to the meeting. To me, the business and board meetings were the high spots of the entire convention, because at these we were able to know and talk to the representatives of the other states and to learn first hand much of the things they are doing in their auxiliaries. It was a most interesting meeting and I am sure that every state representative went home, as I did, fired with new enthusiasm and ambition to make this a greater auxiliary year.

There are 37 states and the District of Columbia with organized auxiliaries, making a total membership of 18,259. One thousand two hundred thirty-eight of this number attended the National Convention this year.

Mrs. Phillips Schuyler Doane of Pasadena, California, has for several years given a trophy to the county of her state showing the greatest increase in membership. This year she extended this to the National Auxiliary and the state of New York won it, having shown an increase of a little more than four hundred per cent in membership over last year. They now have nine hundred members. New York is a comparatively young Auxiliary and that of course explains this great increase. But wouldn't it be a wonderful thing if Arkansas could have this trophy next year? We can if every Auxiliary member works and brings new members into our county organizations. There is a big open field for our Membership Chairman of State, too. There are unorganized counties, and in organized counties there are many eligible women who are not members. We now have 330 members, and with a little extra effort on the part of all of us, we could show a marked increase within the year. Let's try.

In listening to the state reports, it seemed to me that Hygeia and Public Relations were stressed more than the other committees. Of course Hygeia is really a "handbook" and we do much good through our Public Relations meeting, but along with these I want to stress, as I told you at our state meeting, our work in Education and Public Health because it is through these three committees that we can direct public thinking and actions in channels that the medical profession desires and extend authentic information on health.

Our Chairman of State Committees should have definite outlines of program from the National Chairman by the latter part of August and this will be passed on to the County Chairmen at once for your use this Fall. While you are vacationing and whiling away long summer days, keep your Auxiliary in mind and plan some definite work for your own individual county needs. Let me suggest that you file your copies of the Arkansas Medical Journal, as Mr. H. E. Murry, your publicity secretary, will have something of interest for you in each issue. This publication is your means of reaching every County Auxiliary every month. You will also find many things of interest on the Auxiliary page of the American Medical Journal, so get the "Journal" habit. Consider these printed articles personal messages and you will enjoy them and derive some benefit from them.

With best wishes for a pleasant summer vacation, I am,

Sincerely,

(Mrs. Curtis W.) Rosina Jones.

RANDOM THOUGHTS OF THE SECRETARY

June 28th. E. C. Moulton presents himself for treatment of an infection, the second this year, proving to us that we have made one satisfied customer for roentgen-ray therapy.

July 2nd. En route for celebration of the fourth in Colorado meditating over the fact that Kansas has sufficient grasshoppers for one thousand years but no fish to speak of.

July 4th. We tutor the young hopeful in his first fishing expedition, eminently successful according to his neophytic standards, but doubtless viewed with true horror in all its angles by those fervent anglers: Wolfermann, Eberle and Foster.

July 5th. Departing Denver delayed because of holiday crowds, perusing the newspapers and discovering advance publicity of D. A. Rhinehart, speaking before the x-ray technicians tomorrow, a meeting at which we are represented by an able assistant.

July 9th. Douglass, pater, and Douglass, filius, pay a social call, the latter shortly departing for Chicago to assume his professional career, a move regretted in these parts as denying us a continuation of the dynasty of the Franklin County Correspondent.

July 10th. Gratified this day to count noses on 1039 paid members in the Society but wonder just why some 35 or 40 who should be on the line are strangely missing.

July 13th. Present with the Jones for Junior's appendectomy. Pondering the natural, yet strange, reversal of form when the doctor or the doctor's family becomes the patient, a situation with which we have due familiarity after but a simple tonsillectomy.

July 14th. With what we are pleased to term true self-sacrifice, we urge Sid to attend the Midwest Conference in Colorado next week, yet we wonder was it real altruism on our part which accepted his denial of the opportunity!

BOOK REVIEWS

The Diseases of Infants and Children. By J. P. Crozer Griffith, M. D., Ph. D., Emeritus Professor of Pediatrics in the University of Pennsylvania; Consulting Physician to St. Christopher's Hospital for Children; Consultng Pediatrist to the Women's, the Jewish, and the Misericordia Hospitals, etc.; Corresponding Member of the Societe de Pediatrie de Paris; and A. Graeme Mitchell, M. D., B. K., Rachford Professor of Pediatrics, College of Medicine, University of Cincinnati; Medical Director and Chief of Staff of the Children's Hospital of Cincinnati; Director of the Children's Hospital Research Foundation; Director of Pediatric and Contagious Services in the Cincinnati General Hospital. Second Edition, Revised and Reset. 1153 pages with 293 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $10.00 net.

This revised edition will be well received by the profession as was the first edition. It has been recognized as one of the outstanding texts on pediatrics. Condensation into one volume with helpful changes in format are most desirable aids to reading. The brief clinical history which accompanies each chart is a special feature. Artificial feeding has been handled in a concise and simple manner. Preventative medicine and dehydration have received due emphasis. This is an excellent text.

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SOME PHYSIOLOGIC ASPECTS OF HYPERTROPHY AND ANGINA*

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Because of time limitation it is necessary that I confine my remarks to some narrow field of vascular physiology. I have selected two topics, hypertrophy and anginal pain, because they have a common background, adequate nutrition of the heart.

May I, at the risk of boring you, very briefly review some of the heart's behavior. All of the physiological activities in which the blood engages are carried out exclusively in the peripheral vessels, especially the capillaries. The sole function of the heart, and indeed of the whole vascular system, is to supply blood at a favorable pressure and velocity to these peripheral vessels. Mechanically, as Dr. Robinson has told you, the heart consists of two force pumps lying side by side in a single organ. Filling of these force pumps is accomplished passively up to about 75% of their volume, after which contraction of the auricles completes the filling of the ventricles and contraction of the ventricles empties their contents into the arterial tree. Where and how this progressive contractile movement begins has engrossed physiologists for many years. The site of its origin has become localized with some definiteness in the bit of tissue which you have heard described as the sino-auricular node; a somewhat celebrated French investigator, taking exception, locates its origin well up on the root of the great veins. Concerning the "why" of its origin, theories are many. As clinicians your time here is too valuable for any discussion of these theories. I have carefully reviewed them in the American Heart Journal Vol. 9, page 119, 1933, of which I still have a few reprints if you care to ask for one. Suffice it to say here that release of functional heart beats is dependent on certain physical and chemical conditions of which pressure, temperature, oxygen supply, and the presence of sodium, calcium and potassium are essential.

By whatever means the heart beat is released, the wave of contraction sweeps through the auricles, then through the ventricles followed by a similarly progressing wave of relaxation, after which there occurs a brief refractory period during which the heart will ignore any manner of stimulus. The normal rhythm of the heart requires on the average about 0.8 second for contraction, relaxation, and rest. Since it is much easier to shorten the rest period than either the period of contraction or of relaxation, any speeding up of the heart rate is likely to be accomplished at the expense of the heart's rest. The progressiveness of the heart's activities permits some chambers to rest while others labor.

Because the sino-auricular node normally gives rise to the heart beat it is designated as the "pace-maker." Excessive activity of the vagus center in the medulla may slow the rate at which excitation is dispensed from this "pace-maker" and slowing of the heart or bradycardia results; if depression of this area occurs as a result of poor nutrition, degenerative changes, or other pathology a slowing of the heart rate may occur. Similarly, should marked depression from whatever cause affect the auriculo-ventricular node, bundle of His, or other conducting structure some degree of block from "delayed conduction" to complete block may result.

Sometimes an area other than the sino-auricular node becomes hyperirritable and assumes the function of stimulation. It may simply impose additional beats upon the heart, becoming the source of premature beats, it may divide the honor of originating the heart beat with the sino-auricular node setting up a pararrythmia, or indeed succeed in depolarizing the nodal tissue and assuming the role of pacemaker itself.

You will recall that Dr. Robinson described for you a somewhat spiral course for the heart fibers so that their insertion is not far removed from their origin except that it is somewhat

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deeper within the organ. Normally the rate of conduction and the refractory period are integrated to the degree that only one wave of activity is present within the heart at any one time. Experimentally it is comparatively easy to bring about a condition of slow conduction coupled with a shortened refractory period so the heart fibers have recovered from a depolarized state in the vicinity of their origin before the wave of activity has cleared the heart; the recovered fibers become stimulated again by this old wave and the circus movements of flutters and vibrations are born.

Given an orderly spread of contraction throughout the heart, the normal progress of the blood through the heart is governed purely by pressure relationships. The valvular construction is such that given competency, a valve behind an area of rising pressure is closed while that in front is forced open. Certain sounds are normal to the orderly progress of the blood through the heart. The first sound you will recall is attributed to closing of the auriculo-ventricular valves and the vibration of contracting ventricular fibers; the second sound is due to closure of the semilunar valves. Interference with orderly progress of the blood through the heart may arise from narrowing of an orifice through which it must be forced, a stenosis, or by failure of a valve to prevent regurgitation. Either type is likely to be attended by an abnormal sound and this sound is likely to be transmitted in the direction of flow of the column of liquid which gives it origin. Consideration of the pressure relationships within the heart at the moment an abnormal sound is heard will help us in arriving at its cause: i. e., a marked stenosis of an auriculo-ventricular valve may give rise to a murmur which will be transmitted downward and it will occur previous to ventricular systole; marked stenosis of a ventriculo-arterial valve, to a murmur transmitted toward the great vessels and occurring during ventricular systole. If incompetency be considerable in an auriculo-ventricular valve, a murmur transmitted upward will be timed with ventricular systole; a similar incompetency in a semilunar valve will give rise to an abnormal sound transmitted downward during ventricular diastole.

For a brief interlude after the auriculo-ventricular valves are closed by the rising ventricular pressure, the semilunar valves remain closed. During this time no blood is shifted; intraventricular pressure rises rapidly. Once the semilunar valves are forced open, the major part of the blood contained within the ventricules is ejected rapidly. Arterial pressure parallels intraventricular pressure and energy is stored in the aorta by virtue of distention of its elastic tissue. Toward the end of the ventricular systole, both aortic and ventricular pressures are actually falling because of lack of sufficient blood upon which the ventricle may exert pressure. When aortic pressure becomes greater than intraventricular pressure the semilunar valves are closed. The amount of blood remaining in the ventricles will depend upon the time at which the aortic pressure and intraventricular pressure become equalized. In the presence of a high arterial pressure, naturally, this equilibrium will be reached earlier, consequently a greater amount of blood will remain unexpelled from the ventricle. If we are considering the left heart, to this residue blood will be added a full charge from the right heart. The result is a greater distention of the left ventricle and a more powerful beat will combat the elevated arterial pressure. Should an incompetency of the semilunar valves be superimposed, an even greater residue of blood within the ventricle will occur. The amount of the blood regurgitated is somewhat limited by the elasticity of the ventricular muscle and the resistance of the pericardium; it is likely to be sufficient, however, to depress the diastolic pressure sharply and rapidly.

Piling up of back pressure may be shifted from the left heart back to the pulmonary system and finally to the great veins thence lead to a congestion of the liver and other organs. On the other hand, poor venous return to the heart or lack of time for proper diastolic filling due to flutter, fibrillation, or other cause may so fail to deliver sufficient blood to the ventricles that the semilunar valves are not forced open with every beat and a pulse deficit occur.

We have long been taught that the compensatory response of a heart subjected to an increased load is first: a physiological dilatation. If the increased load is imposed over a long period of time, a secondary compensatory result, an hypertrophy due to the increased work, is effected. There is arising a question with regard to compensatory hypertrophy being wholly a work response. Certain investigators report the development of an experimental hypertrophy following a single severe strain imposed suddenly upon a heart, as for example by a massive transfusion rapidly given. If these results are capable of confirmation, we must revise our theory of work hypertrophy to include an element of myocardial injury.

Because of the readiness with which profound

changes in the heart's behavior appear with varying degrees of interference with the coronary circulation, may I briefly comment upon this phase of vascular physiology. As soon as coronary blood flow lags seriously below the level required to meet the demands of the ventricular muscle, sensations of discomfort and pain together with other signs of coronary insufficiency supervene. The differences which occur in hearts from the extremes of real health and severe disease are merely quantitative. After nearly a century and a half of controversy the largest body of opinion is in agreement with the hypothesis of Jenner that the anginal type of pain is caused by an anoxemia of the heart muscle. It has been repeatedly demonstrated that mechanical constriction of the coronary vessels causes intense pain which is relieved when the blood is again allowed to flow freely. The pain of angina due to interference with the coronary circulation was long ago compared by Charcot to the intermittent claudication which is associated with narrowing of the arteries of the lower extremity and more recently the analogy has been strengthened by experimental studies. Thus if skeletal muscle is subjected to contraction while its blood supply is greatly restricted, severe pain is experienced which outlasts the period of contraction and disappears only when the ischemia is relieved. It is well known today that a lesion of an artery is often accompanied by marked peripheral spastic phenomena which may have effects outweighing the actual effects of the lesion. It is equally well known that many of the viscera respond to simple anoxemia with spastic constriction of the blood vessels. Whether the heart partakes in the general "vaso-motor" storm response in sufficient degree to induce death by the anginal route is a debated point, but it must be taken into consideration. Certain it is that anginal pain may or may not present an obvious pathological basis and clinically may appear as a functional disease leading to death.

The results of a marked depression of coronary circulation are dependent not alone upon the location of the obstructing object, if there be one, and the amount of anastomoses possible but also upon the functional state of the remaining uninjured cardiac tissue. We now define cardiac reserve as the range between the normal working level and the upper limit of load to which effective response can be made by the heart. Naturally, if uninjured cardiac tissue possess a good reserve, a greater area of the heart may become ischemic and the circulatory load be maintained. "By advice of counsel," I am determined to stay clear of the old controversy concerning just what constitutes "angina pectoris." It is not out of place here, however, to remind you that pain is not the only untoward event which may attend a marked restriction of the coronary circulation. There may be: (1) Prompt development of ectopic beats leading to tachycardia, ventricular fibrillation, and death; (2) an immediate hypodynamic or exceedingly weak beat leading to low blood pressure and small pulse; or (3) following a return to normal circulatory state from either transient irregularities or hypodynamic beats, death from a myocardial failure usually not long delayed.

Nor are we dependent upon coronary pathology for a state of coronary insufficiency severe enough to endanger life. Potent contributors to death by the anginal route are: (1) The general vaso-constrictor storm and the peripheral spasm incident to injury to an artery, both of which we have previously mentioned sufficiently; (2) any condition of the blood in which its oxygen carrying power is reduced, for example, anoxic anoxemia, secondary or pernicious anemia; (3) any circulatory disorder in which the heart is unable to elevate arterial pressure, for example, mitral stenosis, aortic valvular defects, arteriovenous fistulae, myocardial weakness, etc.

May we conclude with an observation upon angina as a terminal factor in impending heart failure? Defeat will be accomplished whenever the heart's load exceeds the heart's range of response. This may occur as a result of the lowering of the heart's ability to respond to its load or to an increase in this load or both. Failure of the myocardium to respond adequately to the existing load results in overdilation of the heart chambers and an excessive accumulation of blood on the venous side of the circulation. The venous pressures rise throughout and this extending to the peripheral vessels results in an overfilling but also in a reduction of flow in the peripheral vessels. The capillary beds become engorged with slowly moving blood under high pressure. This high capillary pressure results in an abnormal loss of fluid from the blood by filtration; aeration of the blood becomes deficient due partly to a slower flow through the pulmonary circuit and partly to less effective exposure to lung gases because of pulmonary edema. At the tissues, oxygen is more completely unloaded because of the longer exposure and the higher concentration of carbon dioxide. Anoxemia results in an increased permeability of the capillary walls which facilitates the leak-

age and tissue engorgement; renal function fails because of kidney engorgement and diminished capillary flow. Finally, the nutrition of the heart muscle itself is lowered due to poor coronary flow, a condition tending to still further reduce the ability of the cardiac muscle to respond effectively. The high venous and auricular pressures inhibit the return flow of coronary blood through the coronary sinus and anoxemia of the muscle results in a lowered efficiency of oxygen utilization, leading to the condition in which the muscle is using an abnormal amount of oxygen per unit of work done and this in the presence of a much reduced oxygen supply. I challenge you to describe a more vicious circle.

TRACHOMA AND TREATMENT*

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Silver or copper, which shall it be? Perhaps the toss of a coin might decide, for this most important of the chronic conjunctival infections. We have no specific treatment based on bacteriological research and a filtrable virus remains the most probable etiologic factor, nothwithstanding the work of Finoff, Noguchi and others. On an empirical basis, we have efficient means of relief, often cure. The outstanding drug I shall say to be copper sulphate, both astringent and bactericidal. Given a cooperative patient and an early infection, copper will cure many cases.

The treatment in brief, a drop of 2% cocaine and adrenalin on the everted lids. After a minute, apply with a holder a smooth crystal of blue stone to the tarsal conjunctiva of each lid and into all the folds and angles of the conjunctival sac. Keep lids everted three or four seconds. Flush with normal saline. Repeat daily or at least every other day. The doctor must do this.

For home treatment give the patient this prescription:

Copper Sulphate	Grains 2
Glycerin	Drams 2
Water	Qs Ounce 1

Sig. Use in eye morning and night, one to two drops.

Ointment of copper citrate 5% may be tried. When used by several patients of mine, it seemed to irritate.

If successful, this line of treatment will within a month cause removal of the follicles and a smooth appearance of the mucous membrane.

Should it fail, then use expression with roller or ring forceps. I prefer, however, a canaliculus dilator, about 3 mm. in diameter, having a rough or corrugated surface, lightly wound about with a thin layer of cotton. With this next to the mucous membrane and my index finger placed on the external surface for counter pressure I can very accurately determine the necessary pressure. Expression demands some type of anesthesia, varying from a local of cocaine or butyn to a 4% novacain injection, or a general anesthetic in a child. The caruncle and semilunar folds, difficult to handle, may be grasped with a toothed iris forceps through one of the rings of the ring forceps and successfully expressed. Follow expression by an oil or ointment and ice packs, then by a daily probe to prevent adhesions and use the copper as outlined before. Should this fail, after waiting some two or three months, expression may be again tried or scarification may be used.

This recalls the gratage so frequently used by Dr. Webster Fox some 25 years ago. Dr. Fox, in some way, got the immigrants with trachoma from the steamship lines that landed in Philadelphia. With the lid completely everted on a forcep having three sharp teeth in a row, he would scarify criss-cross, using the small three-blade knife, then scrub with a tooth brush and 1/1000 bichlorid solution. After watching him do a number of these, I tried it on perhaps 10 or 12 patients with excellent results in some; in others, not so good.

I have not used the quinine treatment.

In corneal complications, atrophine is usually indicated as well as attention to the conjunctiva.

In pannus, accompanied by trichisis, removal of all inverted lashes by operation or electrolysis is absolutely necessary. Electrolysis has given me excellent results and usually grateful patients. Using the head mirror, set over forehead and a strong light, a pair of plus 6.00 lenses will enable one to see very small lashes and to use the needle with comparative ease. Grasp the lid firmly between left index finger and thumb because the patient will moan and move under even three milliamperes of current.

All in all, I am pleased to pass my trachoma patients to the government hospital or any worthy practitioner who may desire them.

*Read before the Section on Opthalmology and Otolaryngology, Arkansas Medical Society, Little Rock, April 13, 1937.

BRONCHO-PNEUMONIA*

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Monette

Broncho-pneumonia is an inflammation of the terminal bronchi and of the air-vesicles which make up a pulmonary lobule, usually affecting many comparatively small areas of contiguous and neighboring lobules in both lungs and in all lobes.

Varieties. There are recognized two principal types of the disease: The lobular, in which the dissemination of the morbid process and the distinctly lobular involvement of the alveoli can be readily demonstrated, and the pseudolobar, in which the massing and extent of the affected areas give a resemblance to the consolidation of croupous or lobar pneumonia. To these may be added that type which was, at one time, clinically distinguished as capillary bronchitis. Cases may also be separated according to their origin and mode of onset. Those which are the first and independent result of infection or injury are termed primary. They are less common than the secondary cases, which supervene upon acute or chronic infectious maladies, especially whooping-cough, the exanthemata, and tuberculosis, or which complicate widespread infections of various kinds. Both primary and secondary cases may develop frankly or insidiously, or as terminal infection in Bright's disease, diabetes, and simple asthenia of old age.

Symptoms. As the severity of the pathological process varies greatly in different cases, the symptoms have corresponding variability. Necessarily, too, the primary and secondary cases differ in onset and development. In some primary cases the general symptoms are so slight that the patient walks around attending to his usual affairs, or, if a child, plays, with but slight complaint except of cough, or, as is likely to be said, "of cold." This is not infrequent at the beginning of an attack of influenza, which may afterward prove quite severe, if unattended to; and it is the rule in the early stages of tuberculosis. The mistake of looking upon the case as one of simple bronchitis may thus easily be made.

Elevation of temperature, often surprisingly great, will, however, be discovered; percussion and auscultation of the chest will reveal some of the characteristic physical signs. There may be slight pain in the chest, especially if there be pleural involvement, and this is more common in influenza and tuberculosis than in other varieties of the affection. In other cases the symptoms, though rarely, except in influenza, sudden in onset, become quite severe from the first; there is prostration, with high fever, rapid pulse, headache, restlessness, pain in the chest, and respiratory distress, with quickened breathing, cough and usually expectoration; though in children in whom the morbid process ensues as a sequela of some infectious fever the cough is at first dry and harsh. In infants and young children, moreover, there is often difficulty or even impossibility of expectoration, so that the moist sounds of air passing through the mucus retained in the wind-pipe and bronchi may be audible even to the casual observer, and there is then considerable suffocation, thus giving rise to the common synonym of capillary bronchitis; suffocative catarrh. The matter expectorated is not, as a rule, blood-stained, but varies much in its physical characteristics. It is usually mucoid; sometimes, and especially in tuberculosis, mucopurulent; and in influenza, often resembles boiled sago sprinkled with coal-dust. I have come to look upon this black discoloration of the influenzal sputum as quite characteristic. Whether it is common, outside of dusty cities, I do not know. The appetite is impaired, the tongue coated, the lips red and dry at first, afterward cyanotic. The skin is dry and hot. In cases beginning insidiously, the symptoms may suddenly develop after a previous unmarked stage of general depression, or the distress may be of gradually increasing severity.

Both sudden and gradual onset of broncho-pneumonia is observed during the progress of the exanthemata or whooping-cough. Although in measles catarrhal symptoms mark the onset of the malady, they may clear up, and broncho-pneumonia be manifest only when convalescence should be declared.

Out of 56 cases studied by Nicoli, vomiting occurred 6 times, convulsions in 5; chills were noted in 2 cases, and looseness of the bowels was frequent. The writer believes that the most noticeable remittency in temperature is seen in the cases in which the influence of the streptococcus predominates. A critical ending occurred only 9 times in 167 cases. The diagnosis between broncho-pneumonia and meningitis is often difficult, for, in both, spasm of groups of muscles, tache cerebrale, Kernig's sign, Brudzinsky's sign, and rigidity of the neck may occur.

The streptococcus hemolyticus is capable of causing fatal epidemics of interstitial broncho-

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pneumonia. The condition arises with or without such predisposing causes as measles, but seems especially severe after that disease. There is often a diffuse, patchy, lobular pneumonia in which the streptococcus is finely scattered in the alevolar exudate. Such areas may be confluent and resemble lobar pneumonia. Ulceration of the vocal cords and epiglottis and empyema are frequent complications. (McCallum).

Physical examination at first, especially in children, may fail to reveal dullness or even blowing breathing, but there will be discovered, scattered over both lungs and often more frequent and more extensive at the bases, showers of fine, subcrepitant rales. Sibilant bronchi may likewise be heard. In the course of a day or two, sometimes later, scattered areas of dullness associated with bronchial or vesiculobronchial breathing, and moist rales, and sometimes with absence of breath-sounds, indicating atelectasis, are discovered. Of these some are constant and others appear and disappear, shifting dullness. They are found upon both sides, and may be numerous and small, or few and extensive. Sometimes they are massive involving the greater portion of a lobe or of a lung. These massive areas are constant, and over them the breathing is distinctly bronchial, closely resembling that of lobar pneumonia. Bronchophony may be present. In tuberculosis, what I have termed "the isolated apex sibilant rale," is quite characteristic. An apex pleuritic friction is sometimes heard, and usually as the case progresses there develops characteristic crackling, and the liquid rales indicative of softening.

As these signs develop, indicating extension of the local morbid processes, the symptoms become correspondingly severe. Dyspnea increases and the respiration rate arises, with children reaching 60 or 70, with adults rarely exceeding 50, and usually remaining below that number. Cyanosis now becomes manifest. There may be suprasternal and infrasternal retraction. At first, in severe cases, the children exhibit great restlessness and anxiety, but, as asphyxiation progresses, sensation becomes obtunded, drowsiness increases, and, while the breath becomes more gasping, the efforts to obtain air diminish. The heart becomes weaker; the right ventricle is evidently distended; the pulse is small, feeble, and fluttering, and death may occur from cardiac paralysis or from exhaustion. Sometimes there is delirium, cephalalgia, retraction of the head, and tenderness of the scalp and neck, apparently indicating meningeal complications, and convulsions may occur; at other times there is constant or intermittent delirium, with jactitation, and this seems to be rather toxemic than due to cerebral inflammation.

Recovery may take place even in apparently desperate cases, and the symptomatic changes may be as sudden as in lobar pneumonia, though usually the process is gradual, but rapid. The duration varies from about ten days to about three weeks. In cases delayed beyond this the suspicion of tuberculosis or localized empyema becomes strong. Some cases, however, which are not clearly tuberculous, run a remittent or subacute course, and others gradually take on a chronic type.

Diagnosis. It is the frank primary cases and those of insidious onset that cause difficulty in diagnosis. Cases clearly secondary to whooping-cough, the exanthemata, etc., usually tell their own story. There used to be much written concerning the differential diagnosis of capillary bronchitis and broncho-pneumonia. Post-mortem investigation has shown that the differentiation is impossible, for the two conditions usually co-exist. The difference is symptomatic only, and affects treatment only as this is guided by symptoms. It is a question whether in children all cases of apparent acute bronchitis should not be considered, at least potentially, as broncho-pneumonia. Similar caution as to the aged is also desirable. A tendency to recurrence is always suspicious. Apart from this, the physical signs of consolidation differentiate, and in simple bronchitis, moreover, the marked depression is absent. Typhoid fever sometimes begins with signs of broncho-pneumonia. Caution and careful observation will usually direct attention to the true state of the case. As it progresses the characteristic temperature, the splenic enlargement, the rose spots, clear up the diagnosis. Apart from the recognition of influenza as the basic condition, a fact frequently overlooked when epidemics are not manifest, the chief difficulties are to determine whether or not lobar pneumonia exists in a case presenting massive areas of dullness, and to determine whether or not a case of recognized broncho-pneumonia is tuberculosis.

The utilization of the X-rays for the exact diagnosis and pathologic study of pneumonia and other acute lung conditions is endorsed by L. G. Rigler. The type, distribution and extent of pneumonia can be thus accurately determined. Attention is especially directed to a form of localized broncho-pneumonia simulating early tuberculosis and to capillary pneumonia follow-

ing measles. Serial X-ray studies will demonstrate extension of the pneumonic process and the various stages of resolution. Unresolved pneumonia and other residues can be determined definitely. The complications of pneumonia, especially empyema, can be diagnosed very early.

Treatment. In treating broncho-pneumonia in children, sleeplessness should be prevented from the start. In the early stages, and in many cases throughout, potassium bromide and chloral hydrate are best. Tepid sponging often assists. If these fail, 1 minim of tincture of opium or 1 grain of Dover's powder may be given. The dosage in each case must be judged with especial reference to the amount of respiratory distress. For pain in the chest, methyl salicylate ointment is the best local application. In older children pain from a localized patch of pleurisy may be relieved by immobilization of the affected side with adhesive strips. For a tendency to cyanosis, or hindrance of easy respiration by secretion in the tubes, 1/100 grain of atrophine should be given hypodermically in a child of 3 years, 3 times daily or, in severe cases, every four hours. In weakly children, or those with abnormal rapidity or feebleness of the pulse, it is well to give a stimulant from the start. The following is a useful mixture:

Spts. aetheris,
Spts. ammon arom.,
aa ..... m v
Aquae .....q.c. ad f3j

Brandy is a most valuable stimulant in severe cases. Thirty minims may be given at four-hour intervals to a child of 3 directly any tendency to cardiac weakness appears. The dose may be increased to 1 teaspoonful or more, if necessary. Adrenalin seems of value in some cases: 5 minims of tne 1:1000 solution may be combined with injections of atrophine.

In sudden cardiac failure a small and isolated dose of strychnine is of value; it should only be repeated at long intervals. The writer has never observed benefit from digitalis. For collapsed children under 2 years a mustard bath, 1 heaping tablespoonful of mustard per gallon of hot water, is the most valuable stimulant. In certain cases of severe lobar pneumonia and broncho-pneumonia with cyanosis and much respiratory distress, removal to the open air causes immediate and marked improvement. If a spot well sheltered from the wind and rain is obtainable in a garden or on a balcony and the child is in the hands of an efficient nurse, and treatment is very valuable; otherwise it is better avoided. For patients with cyanosis, oxygen is useful when given for 15 minutes in every hour through a catheter introduced into the nose, not from a funnel.

A series of 180 cases of pneumonia in children, in which 90 were treated with mercurochrome and the remainder used as controls, has been reported by L. D. Hoppe, L. H. Goldsmith and W. T. Freeman. For all types of pneumonia the average duration of illness without mercurochrome was 13.3 days and with it, 5.9 days. The mortality was 32.2 per cent, as against 8.9 per cent. In broncho-pneumonia cases, of which 55 received mercurochrome and 61 did not, the mortality was 42.6 per cent in the controls, as against 10.9 per cent in those receiving the drug. The dose is 5 mgm. (1/13 grain) per kilo (2.2 lbs.) of body weight up to 19 kilos (41.8 lbs.); above this weight 4 mgm. (1/16 grain) is used, or 3 mgm. (1/ grain) in severe cases. Careful estimation of the weight and dosage avoids most of the severe reactions. The drug is injected intravenously where possible, otherwise intraperitoneally. Out of 36 cases treated intraperitoneally, 1 unfortunately died of verified colon bacillus peritonitis as a result of transfixion of a loop of intestine with the needle. Mercurochrome should not be used if calomel or other mercurial has been shortly before.

According to H. W. Nott, potassium permanganate rectal injections are of great efficacy in pneumonia, including broncho-pneumonia. The solution used consists of pure potassium permanganate, 2 grains (0.12 Gm.), in "comfortably hot" water, 1½ pints (750 c.c.). From 3 ounces (90 c.c.) to ½ pint (250 c.c.), according to the age of the patient, are injected at a time. The fluid is administered slowly with a funnel and a small tube, or with a Higginson's syringe, and the injections are repeated every 2 to 4 hours during the first 24 to 36 hours of treatment. The shorter intervals, 2 to 2½ hours, are used in severe cases treated late, e.g., on the 4th or 5th day of the disease. When the temperature reaches normal in adults or older children the injections are reduced to two a day for 3 days, then once a day for 3 more days; but in infants or younger children they should be continued twice daily for at least 10 days after defervescence. The treatment is claimed to cause a rapid and permanent change for the better in the clinical picture. The cough becomes less harsh, respirations deeper, expectoration much looser; cyanosis disappears in 18 to 30 hours.

After the first injection a child with advanced broncho-pneumonia will fall soundly asleep, and can be kept sleeping by repeated small injections. The colored sputum suddenly disappears; not uncommonly one sees a bright red sputum in the morning and finds white frothy expectoration in the evening of the same day. Sometimes there is a little hemorrhage for an hour or so just before this change takes place. Crisis is not infrequent, but descent is by lysis in most cases, taking on an average two to three and a half days from the beginning of treatment. In some cases thyroid was given by mouth along with the rectal permanganate treatment, but it is the latter that is regarded as having a specific effect.

Ten per cent glucose solution is reported by B. Soria and E. Halac as having reduced the mortality in 120 children with broncho-pneumonia from 60 to 65 per cent. Administration by the intraperitoneal route was found most effective. To prevent any shock from this procedure use adrenalin before or during the glucose injection.

PROGNOSTIC SIGNIFICANCE OF THE TUBERCULIN REACTION

The diagnostic value of the Von Pirquet cutaneous reaction has long been unquestioned. More recently much interest has been aroused in its possible prognostic significance through studies of variations in individual sensitiveness shown by delicate methods of testing. Dr. Watson's conclusion is that pronounced sensitiveness to tuberculin is an advantage to its possessor whether he has latent or clinically evident disease. This is because of a satisfactory supply of an activating substance in the blood serum which he calls "ergine," which breaks down circulating tuberculin into an irritant body producing toxic phenomena and some other unknown substance or substances.

Ninety-six cases of clinical tuberculosis were studied from 1925 to 1933. Reactions to the tuberculin test were minutely observed and the cases were classified as: (1) those where a strongly positive reaction was obtained; (2) those where a strongly positive reaction was not obtained. Observation of these cases six months later showed that 55 per cent of those who had not reacted strongly were prognostically bad, while only 17 per cent of those who had reacted strongly were in a like condition. Of the former 18 per cent had died, of the latter only 4 per cent.

In 1933 the survival rate for the whole group was 53 per cent, of the strongly positive group 56 per cent, of those not strongly positive 42 per cent, or a spread of 14 per cent in favor of the strongly positive group. Selecting only sputum positive cases from the whole group results were similar but with a lower differential, 8 per cent.

Further evidence of the prognostic significance of the strongly positive reaction may be deduced from the fact that such pronounced reactions are usual in case of extra-pulmonary surgical tuberculosis and that there is little tendency for these localized lesions to become generalized.

Again there may be cited the accepted vulnerability to tuberculosis found in the "virgin soil" of primitive races as illustrated by the severity of the disease among American Indians or in Professor Cummins' studies among the natives of South Africa. Dr. Cummins speaks of the "natural liability" to tuberculosis infection associated with "virgin soil" as a "dangerous defile at the very start of the road toward immunity."

It is a familiar experience to find a reduction in strength of the tuberculin test or its disappearance during the acute stage of a concurrent infectious disease. This fading away of the reaction may be evident in measles, typhoid, influenza, acute rheumatism, pneumonia, smallpox vaccination, chickenpox and whooping cough. Realizing the frequency with which some of these appear to stimulate tuberculosis activity it is reasonable to suppose that the disappearance of the skin reaction represents an embarrassment of the organism in its struggle against an existing tuberculous infection.

Professor Heimbeck's experience and similar observations of Spehl and Thys in Brussels in the study of tuberculosis morbidity among nurses are introduced as further indication of a certain prognostic siginificance to be drawn from variations in intensity of skin reactions in adults.

The Author's Hypothesis of the Significance and Meaning of the Tuberculo-Cutaneous Reactions.

Before drawing final conclusions from these and other observations the question of the mechanism of the tuberculin reaction itself confronts us. The following experiment of Calmette is illuminating. When tuberculin is introduced into the conjunctival sac of a non-tuberculous subject no reaction takes place. If blood serum from an actively tuberculous patient is introduced similarly in another non-tuberculous subject there is still no reaction. If, however, tuberculin be mixed in vitro with blood serum from

a tuberculous patient and the tube kept for a given time at a given temperature and then injected into the conjunctival sac of a known non-tuberculous subject, a prompt reaction takes place.

From this it may be concluded that: Tuberculin per se does not cause this reaction and serum from a tuberculosis patient does not cause it. There must, therefore, be a substance in the serum of the tuberculous patient which acts on the tuberculin to liberate something causing the toxic and irritant phenomena in the eye.

Living tubercle bacilli flourishing in a patient's body produce a substance resembling tuberculin. This comes in contact with the blood serum of the infected individual and the test experiment above described is repeated. The organism, as in other bacillary invasions, should now give a protective response. A substance appears in the serum which so acts on the tuberculin as to disintegrate it into (a) an irritant body producing toxic phenomena, and (b) some other unknown substance or substances. The author suggests the name "ergine" for this substance and assumes that the action of "ergine" on tuberculin is a stage in the elimination of tuberculin from the infected organism. Since constitutional and focal reactions terminate favorably in a large number of tuberculous cases, it is also reasonable to assume that the toxic body (a) is combated by the elaboration of some anti-toxic factor which disposes of and eliminates the products of the action of the "ergine" on the tuberculin. Furthermore, it is again reasonable to assume that the more sensitive the organism is to tuberculin, i. e. the smaller the concentration of tuberculin required to give a response of "ergine," the more quickly will the tuberculin, collected or elaborated in that body, be disintegrated and disposed of.

Calmette found that if a guinea-pig, inoculated with living tubercle bacilli, was given gradually increasing does of tuberculin (1) it became increasingly difficult to produce the reaction phenomena in the animals under treatment with tuberculin. However, such pigs always reacted to massive doses. (2) The serum of these treated animals contained nothing capable of neutralizing tuberculin in vitro, nor of passively immunizing other guinea-pigs against tuberculin. (3) The power of absorbing large doses of tuberculin without reaction was soon lost by the animals if the injections were suspended. (4) The lesions of these animals did not tend to progress more slowly than the lesions of the infected but untreated animals, but tended to progress more rapidly than in the controls.

Conclusion

There does not seem to be, at least in the guinea-pig, any relation between the power to absorb tuberculin without reaction and the power to successfully combat tuberculous infection, i. e., tuberculin per se is harmful even before the "ergine" has acted on it to produce toxic phenomena and further in the guinea-pig at least even more harmful than the "erginised" tuberculin.

The process of elimination of tuberculin consists of: (a) a response of "ergine" immediately followed by more or less reaction phenomena; (b) elimination at a varying rate of the results of the action of the "ergine." Organisms with quick and efficient "ergine" response dispose of their tuberculin piecemeal, obviating toxin saturation. Organisms with a slow or late "ergine" response permit the accumulation of tuberculin before "ergine" appears and functions with the resulting production of sudden large volumes of toxin.

One is now in a position to state the following hypothesis: Since toxin saturation of tissues is undesirable, since accumulation of tuberculin in the tissues is undesirable, and since the evolution and action of an "ergine" is an essential factor in the prevention of both, then acute sensitiveness to the presence of tuberculin in the tissues leading to "ergine" formation and action before large amounts of tuberculin have accumulated tends to facilitate the elimination of the latter and prevent toxin saturation of the tissues, i. e., sensitiveness to tuberculin is of advantage to the infected organism.

The power to give a strongly positive Von Pirquet reaction is direct evidence of such sensitiveness.

Prognostic Significance of the Von Pirquet Cutaneous Reaction in Adults, Wm. G. Watson, M. O., Ch.B., Tubercle, March, 1937.

COMING MEDICAL MEETINGS.

Kansas City Southwest Clinical Society, Kansas City, October 5-8th.

Fort Smith Clinical Society, Fort Smith, October 12th.

Interstate Post Graduate Medical Association of North America, Saint Louis, October 18-22nd.

Oklahoma City Clinical Society, Oklahoma City, November 1-4, 1937.

Southern Medical Association, New Orleans, November 30-December 3, 1937.

Arkansas Medical Society, Texarkana, April 18-20, 1938.

American Medical Association, San Francisco, June 13-17, 1938.

THE JOURNAL
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

EDITORIAL

NATIONALIZATION OF THE MEDICAL PROFESSION

Quite properly did the House of Delegates of the American Medical Association refer the thoughts contained in Senator Lewis' speech before that body to the Board of Trustees for appropriate study and action. After this interval, it becomes possible to evaluate more calmly the events associated with that rather sensational appearance. Early in August, the senator took the step which he advised the House of Delegates was already "upon you, doctors," by introducing into the United States Senate a bill to make all United States physicians and surgeons civil officers of the government. This bill provides: "Any such physician or surgeon shall render such medical or surgical aid requested of him by any impoverished individual who is in need of such aid, and, where necessary, to order the hospitalization of any such individual." The Social Security Board is to be authorized and directed to pay all bills so created. The usual penalty for fraud attaches. Little hope of the passage of such a bill by the present Congress is held, but significance is added to the resolutions deploring the regimentation of the medical profession as advocated by the senator which have now been adopted by a number of state medical societies. The number of these resolutions, expressing complete antagonism to any such development in this government, is but bound to increase. Organized medicine is firm in the fight to maintain its traditions and its fundamental philosophy.

THE DOCTOR AND VACATION

Trite though the saying may be, we feel that this is an appropriate season to call attention to the virtue of the comment: "Practice what you preach." It is quite fitting to remind physicians that this form of therapy which they so fervently sell to their harassed patients, is of equal, if not greater, curative value to the prescriber. The practice of medicine is indeed a hard taskmaster; it constantly saps vitality, both physical and mental, from each of its devoted disciples. There is no more satisfying way in which the reserve of strength may be built up than by a judicious abstinence from the daily toil for a period of two weeks each year. There yet remains for Arkansas physicians ample opportunity to get away for such a rest, to take that long-planned trip, to go some place far removed from their telephones. Why not do it?

PROCEEDINGS OF SOCIETIES

The Southeast Arkansas Medical Society met at McGehee July 22nd. Irving Spitzberg, Little Rock, discussed "Childhood Tuberculosis" and general discussion was held on infantile paralysis.

The Tri-County Clinical Society met at Arkadelphia July 29th for the following program: "Infections of the Hand" (motion picture), John M. Smith, Morrilton.

O. G. HIRST, Councilor.

The Benton County Medical Society met in dinner session at Bentonville, August 12th, the meeting being devoted to a discussion of various local subjects.

GEO. M. LOVE, Secretary.

The Seventh Councilor District Medical Society was organized at a meeting held August 10th in Malvern, the following officers being elected: President, W. G. Hodges, Malvern; Vice-President, C. W. Jones, Benton; Secretary, Thos. C. Watson, Benton, and Treasurer, C. K. Townsend, Arkadelphia. On the scientific program were Geo. B. Fletcher, Hot Springs National Park, "Infantile Paralysis," and S. B. Hinkle, Little Rock, "Recent Advances in Obstetrics." The members of the Hot Springs County Medical Society entertained with a dinner following the session. The Society will next meet at Benton, October 19th.

The Lonoke County Medical Society was addressed August 11th at Lonoke by A. C. Kirby, S. F. Hoge, R. Q. Patterson and B. A. Bennett, all of Little Rock.

OBITUARY

John E. McMahan, aged 77 years, died at his home in Conway July 31st after a prolonged illness. A graduate of the University of Louisville School of Medicine in 1900, he had resided in Conway for 25 years. He took part in the organization of the Faulkner County Medical Society in 1902 and remained an active member until failing health forced his retirement in 1932. He was a member of the Masonic bodies and of Bendemeer Grotto, Little Rock. Surviving relatives are a sister, two brothers and an adopted son and daughter.

PERSONALS AND NEWS ITEMS

Chas. T. Chamberlain, Fort Smith, has been elected an associate fellow of the American College of Physicians.

Walter Cale was a recent winner at a shoot of the Atkins Skeet Club.

Aris W. Cox, Helena, was an entrant in the Mobile Bay Fishing Rodeo.

Dr. and Mrs. Ellery C. Gay, Little Rock, spent a vacation motoring in Georgia, Kentucky, North Carolina and Virginia.

Dr. and Mrs. R. B. Robins, Camden, spent a July vacation in Michigan.

Dr. and Mrs. T. P. Foltz, Fort Smith, spent a vacation at Corpus Christi in August.

Dr. and Mrs. Geo. V. Lewis, Little Rock, were on vacation during July in Colorado.

In attendance at the Morrilton Health Center in July were: W. Myers Smith, Little Rock; A. B. Tate, Russellville; J. F. Hays, Augusta; J. W. Ringold, Ashdown; T. C. Watson, Benton; M. B. Owens, Newport; B. M. Stevenson, West Memphis; Marcus T. Smith, Conway, and M. H. McAlister, Fayetteville. The course was conducted by W. P. Scarlett.

Harvey S. Thatcher, Little Rock, has been granted certification by the American Board of Pathology.

Arkansas friends will be pleased to know that full control of the Oakwood Sanitarium, Tulsa, has been acquired by Ned R. Smith.

Dr. and Mrs. H. W. Hundling, Little Rock, were on vacation in New Mexico during July.

MARRIED—At Warren, on August 7th, Dr. W. A. Snodgrass, Jr., and Miss Mary Jane Moseley.

The following have been elected post surgeons of their respective American Legion posts: E. J. Horner, Jonesboro; E. Baker, Dermott; J. W. Butts, Helena, and S. A. Drennen, Stuttgart.

W. B. Grayson recently addressed the North Little Rock Lions Club.

John W. Redman, formerly of Charlotte, is now associated with Hugh Johnson at Fort Smith.

W. T. Wilkins has been elected a director of the Young Business Men's Club of Cotton Plant.

M. E. Foster, Fort Smith, spent a vacation in Colorado during August.

F. D. Smith, Blytheville, took a vacation trip through Mexico in July.

The following officers of the Arkansas National Guard were on duty for the annual field training period: 153rd Infantry, Maj. Howell Brewer, Capt. H. K. Carrington, Capt. O. T. MacLaughlin, Capt. H. C. Brooke; 142nd Field Artillery, Capt. J. T. Matthews; 206th Coast Artillery (A-a), Maj. W. R. Brooksher, Capt. Stanley M. Gates, Lt. Norris C. Hodge.

Dr. and Mrs. Daniel Hardeman, Little Rock, were on vacation in Minnesota during July.

Thos. Wilson has moved into his new office building at Wynne.

Joe Verser has entered practice with his father at Harrisburg.

L. L. Hubener, formerly of Dyess, has moved to Blytheville.

E. A. Bing, Marshall, has recovered from an appendectomy.

Dr. and Mrs. Paul Mahoney, Little Rock, spent a July vacation in Minnesota.

Dr. and Mrs. W. L. Sadler, Little Rock, spent a July vacation in California.

Dr. and Mrs. A. A. Blair, Fort Smith, spent an August vacation in Virginia.

Fred H. Krock, Fort Smith, spent a July vacation in California.

H. H. Smith, Fort Smith, spent an August vacation in Florida.

Pierre Redman has been appointed superintendent of the Mena Hospital. Physicians elected to the executive board are: B. H. Hawkins, H. G. Heller and Pierre Redman, of Mena, and C. A. Campbell, of Hatfield.

Recent assignments by the State Board of Health: F. S. Dozier, moved from Clarendon to direct the Polk county unit at Mena; W. C. Riggins, to direct the Ashley, Chicot and Desha counties unit, and Max F. McAlister, formerly of Fayetteville, to direct the Miller county unit.

Dr. and Mrs. C. B. Billingsley, Fort Smith, were on vacation at Monte Ne during August.

John M. Smith has been elected a director of the Morrilton Junior Chamber of Commerce.

The woman about to become a mother or with a new-born infant upon her bosom, should be the object of trembling care and sympathy wherever she bears her tender burden, or stretches her aching limbs. The very outcast of the streets has pity upon her sister in degradation, when the seal of promised maternity is impressed upon her. The remorseless vengeance of the law brought down upon its victims by a machinery as sure as destiny, is arrested in its fall at a word which reveals her transient claim for mercy. The solemn prayer of the liturgy singles out her sorrows from the multiplied trials of life, to plead for her in her hour of peril. God forbid that any member of the profession to which she trusts her life doubly precious at that eventful period, should hazard it negligently, unadvisedly or selfishly.—Oliver Wendell Holmes.

When one reviews the history of medicine and contemplates the character and lives of the distinguished practitioners of the past and present, he realizes that no profession has accomplished more than ours in the promotion of human welfare and in helping to build a race of men and women that will be a credit to our country and maintain a more beneficient influence in promoting the welfare of mankind. We should be proud of our medical inheritance and the fact that we belong to a profession including so many self-sacrificing men and women, whose efforts aim to relieve human suffering and to bring joy and comfort to our fellow men. One neglects his sacred duty if he fails to use every effort to keep abreast of medical progress and to be constantly prepared to meet the exigencies and demands of modern medical practice.—Osler.

RANDOM THOUGHTS OF THE SECRETARY

July 26th. Arriving by air-conditioned train in contrast to the travel mode of the rest of the regiment, we assume our accustomed place in the scheme of the annual field training period at Fort Barrancas. Striking improvements in the physical appearance of the old post together with a climate decidedly cooler than our own Arkansas promise that this Florida sojourn will be not without its happy side.

July 27th. Certain mess sergeants and non-coms in charge of quarters find that there has been a drop in the grades given due to change in inspecting officers. We acquire a certain amount of notoriety, hearing our approach heralded from mess hall to mess hall, and from barrack to barrack, in some instances, we must admit, coupled with some lack of respect in the passing of the news.

July 29th. We board the good ship, Clarence M. Condon, for a ferry passage across Pensacola Bay at 6:55 A. M., and thrill to the sight of some 60 to 75 navy seaplanes taking the air at 7:00 A. M. This is one of the most beautiful of our combined sea and sky impressions, the thunderous roar of the motors, the glistening hulls cleaving the deep blue waters, turning them into a soft white spray, restlessly subsiding as each plane breaks away from its embracing waves.

July 31st. The bugler sounds a different call this day, unfamiliar to rookie and veteran alike, but its significance is not long lost upon this soldier host—pay day. With due solicitude, the regiment is confined to the camp area for the rest of the stay.

August 1st. Traveling the gulf coast, a vista of far-reaching water and distant horizons, with more intimate views of the stately oaks and the festooning Spanish moss, a harsh note added by the thousands of pines scarified for essential resins. Gulfport in the evening, the sport-minded hero worshippers stepping in awe over floors trod by Hubbell, Mancuso and ilk of the Giants tribe the past spring. Cynical as we oft are, we note the name of many an unfamiliar, men as yet in the bench-warming crowd, though the season is now most over; or, perhaps, returned to the minors. And therein lies the material for many a story by a better master of prose and imagery.

August 2nd. Over a Mississippi in the process of rebuilding, advertising a $42,000,000 road program, we hope not to be built of what appears to be a well-nigh universal material, dust. Arriving Jackson in the heat of a summer afternoon, no shower available, accustoming ourself to those hardships of the military life, but, with the good luck which frequently comes our way, discharged from further duties at 7:13 P. M. and roaring away in a private car at 7:15 P. M. for Vicksburg, Louisiana and southeast Arkansas, taking time out at McGehee at 11:30 P. M.

August 3rd. Departing McGehee at 6:15 A. M. and when H. T. Smith reads these lines, he can know that we thought of him but restrained from social activity in view of the hours.

August 4th. The usual routine of our life asserts itself, Jones' remark that this is "but the place where we change trains" seemingly amply denied by volume of detail which requires our immediate attention.

August 7th. A swarm of bees, quite intent upon a vacation, group themselves on Mean's car, confirming our belief that a bee looking for a respite from hard work and lots of it, knows just where to go.

August 9th. Our entire afternoon is completely wrecked; in our hearing some one tells that the official temperature for the day is 105', this being a subject we have consistently avoided cognizance of for the entire summer, at that to our relief. Promptly on hearing this item of news, we begin to swelter and feel sorry for our untimely lot.

August 10th. Traveling many a torrid mile with Wolfermann, the occasion being a gathering at Malvern for the organization of the Seventh Councilor District Society, a feat definitely accomplished with the enthusiasm of Councilor Euclid Smith and some twenty cooperative physicians. Watson gives us all the thrill which goes with being photographed, rabid camera fan that he is. Listening to a calm appraisal of infantile paralysis by George Fletcher and reassured. Then, although we are decidedly not interested in the specialty, we enjoy the best talk we have ever heard Hinkle give on obstetrics; a true crusader in his field. To dinner at the Barlow, fortunate town to have a Barlow hostelry, where typically good food and fellowship abound, not disturbed apparently by the words which we broadcast. For the first time in our life, we are present when Sid gives up the wheel at night and becomes as an ordinary mortal, sleeping away the miles to Dardanelle, where we take on coffee in the manner of truck drivers and away for bed at 2:00 A. M. And of the stories with which we have been regaled this day, we think the man who told funny tales to himself by far the most provocative of laughter, as did Barrier and Wootton.

FALL CLINICAL CONFERENCE OF THE KANSAS CITY SOUTHWEST SOCIET SOCIETY

A most interesting and instructive program for the Fall Clinical Conference of the Kansas City Southwest Clinical Society to be held in Kansas City, October 4 to 7, is nearing completion. The four afternoon sessions will be devoted entirely to presentations by guest speakers, some of whom will also participate in the programs of the two sections to be presented each morning by members of the society.

Two sectional sessions will be held each entire morning which will include discussions of medicine, industrial surgery, obstetrics and gynecology, pediatrics, syphilis, urology, surgery and proctology. Speakers for discussions have been particularly chosen by the program committee for each lecture and an excellent program can be expected.

Guest speakers for the conference include Dr. Alfred E. Barclay, Oxford, England; Sir George Lenthal Cheatle, London, England; Dr. R. B. Cattell, Boston; Dr. Frederick A. Coller, Ann Arbor; Dr. Wm. D. Gill, San Antonio; Dr. Arnold Jackson, Madison; Drs. Richard H. Jaffe, Herman L. Kretschmer and Paul B. Magnuson, Chicago; Dr. G. D. Royston and Father A. M. Schwitalla, St. Louis; Dr. Ferris Smith, Grand Rapids; Dr. Fred M. Smith, Iowa City; Dr. Robert A. Strong, New Orleans; Dr. O. H. Wangensteen, Minneapolis, and Dr. Bernard L. Wyatt, Tucson.

The Fall Conference promises to be the most attractive in the history of the society and warrants a full attendance.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

The Woman's Auxiliary to the Arkansas Medical Society enters upon another year with the usual number of pressing problems, new and old. The reasons for the existence of the Auxiliary are endless in number; social, philanthropic, legislative, educational. It is not a woman's club, but a service group to its Medical Society, and to serve that organization it must conduct its program always in compliance with the plans and wishes of that group.

A member of the Auxiliary is eligible through her husband, but she serves his profession and not him individually. As his wife she might be accused of promoting her husband, but as a member of a medical Auxiliary her efforts are under the control of organized medicine.

Physicians believe that the county medical society constitutes the basic foundation of organized medicine. They realize that it must receive the earnest cooperation of its membership, which support must begin with enthusiasm brought about by regular and consistent attendance. Should doctors' wives question their wisdom in this? The same is true of the Auxiliary. From the experience of the past few years, there can be no opinion contrary to the fact that each year, each month, more doctors' wives are realizing the broad expanse of the field of service open to them as auxiliary members.

Since our state Auxiliary has been divided into ten districts corresponding to the Councilor Districts of the Medical Society, the organization committee should find it possible to function more efficiently and more easily than ever before. Under this plan a closer contact should be established and maintained among neighboring auxiliaries, whether large or small. State officers and chairman are enabled to reach personally a much larger per cent of members in these group meetings, than in attempting to visit each county auxiliary. New or small auxiliaries will not be allowed to die or become anemic because of neglect of state officers and chairmen. It is the opinion of the writer that when the possibilities and advantages of this change in organization are fully appreciated, an increased interest in district organization work will greatly strengthen all county groups, and thereby promote the growth of the state auxiliary.

District Chairman for 1937-38 are as follows:

District No. 1, Mrs. T. F. Hare, Crawfordsville
District No. 2, Mrs. C. G. Hinkle, Batesville
District No. 3, Mrs. T. G. Porter, Hazen
District No. 4, Mrs. Charles Dixon, Gould
District No. 5, Mrs. R. B. Robins, Camden
District No. 6, Mrs. P. H. Phillips, Ashdown
District No. 7, Mrs. John Proctor, Hot Springs
District No. 8, Mrs. R. C. Kory, Little Rock
District No. 9, Mrs. D. K. McCurry, Green Forest
District No. 10, Mrs. W. R. Brooksher, Fort Smith
Mrs. J. B. Crawford, President-Elect, El Dorado.

Upon these women who compose the committee on organization rests a large responsibility, that of organizing these Auxiliaries and of conducting regularly the meetings in their respective districts.

It is essential that the members of the organization committee be equipped with a full knowledge of national and state official programs and familiarity with state and county constitutions. No phase of organization should be overlooked—the work in counties already organized and efforts to organize new auxiliaries. Again, the district plan is ideal to facilitate each of these endeavors.

The following tentative plan will be followed preceding the Fall Board meeting:

1. District Chairman will please begin organization work as early as possible during the summer.
2. List counties which have had auxiliaries but where auxiliaries no longer exist. Make effort to secure the interest of individuals in those counties. The same should be done in counties which have never been organized.
3. In all active county auxiliaries request the appointment of first vice-president as membership chairman. List names of these.
4. Request program chairman in each county to reserve one program early in the year at which time you will be permitted to conduct a study for the purpose of instructing the members on the aims and purposes of the Medical Auxiliary. Doctors' wives from nearby unorganized counties should be inivted to attend this meeting.
5. Ascertain number of members in your district, also non-members who are eligible.
6. District chairman will please bring to the Fall Board meeting this and all other information possible relative to their districts. Also they will please bring outlines of plans for organization work in their districts. There will be much follow-up work. Early information is important.
7. Make plans immediately for regular district meetings. Information regarding dates and places of meetings can be secured from District Councilors or secretaries of Medical Societies.

The successful organization committee is the one which works in close cooperation with the other officers and chairman and which looks upon membership not as an end in itself but an instrument for promoting the objects of the auxiliary.

MRS. C. E. KITCHENS,
Chairman of Organization, DeQueen, Arkansas.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The next written examination and review of case histories of Group B. applicants by the American Board of Obstetrics and Gynecology will be held in various cities in the United States and Canada on Saturday, November 6, 1937.

The next general examination for all candidates (Groups A and B) will be held in San Francisco, Cal., on June 13 and 14, 1938, immediately prior to the American Medical Association meeting.

Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania. Applications for these examinations must be filed in the Secretary's office not later than sixty days prior to the scheduled dates of examination.

BOOK REVIEWS

An Introduction to Dermatology. By Richard L. Sutton, M. D., Sc. D., L. L. D., F. R. S. (Edin) Professor of Dermatology, University of Kansas School of medicine and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P. (Edin) Instructor in Dermatology, University of Kansas School of Medicine. 3rd edition. Illustrated. Pp. 666. Price $5.00. Saint Louis: C. V. Mosby Company, 1937.

This is an improved text over the previous edition. A number of new diseases have been added but not enough to affect its simplicity. The commoner skin diseases are well described and illustrated while the less common conditions are mentioned. New information regarding therapy has been added. Many conditions have been reclassified on the basis of etiology. The sections on atropic eczema, cancer, inflammation, dermatitis venenata and syphilis have been enlarged and imptoved . The section on animal parasitic conditions has been revised. The treatment of infantile eczema has been simplified and is more complete. The section on syphilis included the findings of the cooperative clinical group and the more modern methods of treatment.

The treatment of the various common skin diseases is complete; opinions of leading dermatologists on treatment are given. The number of opinions might confuse the student or general practitioner. By writing the better prescriptions out in detail and giving the more conservative treatment first there might be less confusion to the student. It is a text that every student and general practitioner should have.

Medical Formulary. By E. Quin Thornton, M. D., Emeritus Professor of Therapeutics in the Jefferson Medical College, Philadelphia. 14th edition. Pp. 362. Price $2.75. Philadelphia: Lea and Febiger, 1937.

The purpose of this volume is to popularize prescription writing and to discourage the use of secret and quasi-secret manufactured preparations. Its popularity may be guaged by the fact that it has had fourteen editions in thirty-eight years. The prescriptions are therapeutically sound but one feels that certain more recent remedies might well have been included along with mandelic acid. The book will be most helpful to the physician who properly desires to prescribe his own compounds.

Physical Diagnosis. By Don C. Sutton, M. S., M. D., Associate Professor of Medicine, Northwestern University School of Medicine; Attending Physician, Chairman of the medical division of the Cook County Hospital; Chief of the cardiac clinic, Cook County Hospital; Attending Physician, Evanston Hospital. Pp. 495. 298 illustrations. 8 color plates. Price $5.00. Saint Louis: C. V. Mosby Company, 1937.

The arrangement of this book makes it especially attractive for use as a text. The methods of physical diagnosis are thoroughly discussed before the student is led into the various regional examinations. The most complete section is that on the heart. An excellent historical introduction is included. Throughout the book the author emphasizes the importance of direct examination and the necessity for attaining a high degree of proficiency in this art. For the practitioner who wishes to review physical diagnosis, this text will serve as an excellent outline. For the student it is a most satisfactory text.

Laboratory Diagnosis of Syphilis. By Harry Eagle, M. D., Passed Assistant Surgeon, United States Public Health Service; Lecturer in Medicine, Johns Hopkins University Medical School. Pp. 440. Price $5.00. Saint Louis: C. V. Mosby Company, 1937.

This book describes all the various serologic tests for syphilis, taking up the underlying principles and their limitations. The aim of this volume undoubtedly is to reduce the confusion regarding these tests both as to technic and their reports. This is an excellent book for the practitioner as well as for the serologist.

Infantile Paralysis and Cerebral Diplegia. By Elizabeth Kenny with foreword by Herbert J. Wilkinson, Professor of Aanatomy and Dean of Faculty of Medicine, University of Queensland, Sydney, Australia. Price, 21 shillings, Sydney, New South Wales, Australia: Messrs. Angus and Robertson, 1937.

The whole contents of the book are based on what can be accomplished by thorough supervision of trained physiotherapist, and is illustrated and presented in such a manner that all its details can be comprehended by any one who may have the privilege of reading or studying its contents.

The author's wide experience coupled with her scientific knowledge of the function of the muscles of the body which can be helpfully restored to a normal function under proper and scientific training, as the author has been able to work out, make the book certainly worth while.

The contents of the book are based on a more thorough and comprehensive knowledge of muscle restoration than any book that I know on the market today.

It really gives me pleasure to recommend this book.

F. WALTER CARRUTHERS, M. D.

The Larynx and Its Diseases: By Chevalier Jackson, M. D., Sc.D., LL.D., F. A. C. S., Professor of Bronchoscopy and Esophagoscopy, Temple University, Philadelphia and Chevalier L. Jackson, A. B., M. D., M. Sc. (Med.), F. A. C. S., Professor of Clinical Bronchoscopy and Esophagoscopy, Temple University, Philadelphia. 555 pages with 221 illustrations, including 11 plates in color. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $8.00 net.

This work comes at a time when the diagnosis and treatment of laryngeal disease is recognized as belonging to the specialized field of laryngology, and will fill its place among the best specialized works on the subject. It can be referred to with assurance of sound and practical opinion. It treats the subject of the different disease entities in more detail and with more illustrations than the previous works, which covered subjects other than laryngology. It is filled with an abundance of drawings and colored plates, whose exactness as to coloration and appearance is undisputed. This book is the result of a long life of experiences of the father in collaboration with his son. Any physician can well afford to refer to this work to avoid loss of time in arriving at a definite diagnosis in cases of hoarseness, dyspnea, and other conditions. If it does nothing more than eliminate guess work in diseases of the larynx, it has easily proved its worth.

The theme presented emphasizes that to view a condition directly with the naked eye, in addition to careful histories, physical examinations, clinical laboratory aids, is preferable to missing the diagnosis through guesswork.

A Textbook of Surgical Nursing. By Henry S. Brookes, Jr., M. D., Instructor in Clinical Surgery, Washington University School of Medicine; Surgeon to the Outpatients, Washington University Dispensary. Pp. 636. 233 illustrations. Price $3.50. Saint Louis: C. V. Mosby Company, 1937.

The author and co-author of this book have had several years experience in teaching medical students and nurses. The various chapters throughout the book are very well written and illustrated by famous authors. The chapter on pre- and post-operative care is very good, well outlined and illustrated. This chapter simplifies a better understanding of post operative complications for the nurse.

Anesthesia is not over done but being written by the author, who is an anesthetist, goes into the detail of local, regional, sacral, spinal, inhalation anesthesia, avertin, etc. The apparatus used, step by step, preparation, administration, contra-indications, and complications are well described.

The chapter on special procedures in outlined form is worthy of any nurse's library. These procedures include: enemata, prococlysis, colon irrigation, catheterization, bladder irrigation, hyperdomoclysis, intravenous administrations, gastric lavage, suction-siphonage procedures, blood transfusions, tracheotomy with nursing care, etc. Each of the above procedures lists each item used and well outlined step by step with illustrations.

The chapter on surgical diets of various types is very good, and something which all nurses should know. "Medico-legal" problems is well written. The book has a chapter of prefixes and suffixes and some 7,800 definitions, a convenient dictionary for the student nurse.

The Nutritive Value of Canned Foods. Compiled by Nutrition Laboratory, Research Department of the American Can Company. Pp. 110. 10 illustrations and 8 plates. New York: American Can Company, 1937.

In this volume are summarized facts about tin containers and canned foods, dealing concisely with the preservation of foods, dietary requirements, the conservation of minerals and vitamins in canned foods, and the safety of such canned foods. The process of manufacture of tin containers is discussed, as is the procedure of canning. An appendix of reference tables and a bibliography add to the general value of this work.

Ophthalmoscopy, Retinoscopy and Refraction. By W. A. Fischer, M. D., F. A. C. S.; Professor of Ophthalmology, Chicago Eye, Ear, Nose and Throat College; Formerly Professor of Clinical Ophthalmology, University of Illinois; formerly Surgeon, Illinois Charitable Eye and Ear Infirmary; formerly President, Chicago Ophthalmological Society. Fourth Edition. Pp. 210. 240 illustrations and 24 colored plates. Price, $2.00. Chicago: H. G. Adair Printing Co., 1937.

This book contains much useful information and many practical points presented by an author of considerable experience. The plates, diagrams and illustrations are excellent. The author purported to simplify ophthalmoscopy, retinoscopy and refraction for easy assimilation and application by the general medical practitioner and student; this, he has succeeded in accomplishing to only a limited extent. The chapter on orthoptic treatment of strabismus is timely and interesting.

Operative Surgery. By Shelton Horsley, M. D., LL. D., F. A. C. S., Attending Surgeon, Saint Elizabeth's Hospital, Richmond, Virginia, and Isaac A. Bigger, M. D., Professor of Surgery, Medical College of Virginia, Surgeon-in-Chief, Medical College of Virginia Hospitals, Richmond, Virginia, with contributions by C. C. Coleman, M. D., F. A. C. S., Austin I. Dodson, M. D., F. A. C. S., John S. Horsley, Jr., M. D., and Donald M. Faulkner, M. D. Fourth edition. Two volumes. Pp. 1387. Illustrated. Price $15.00. Saint Louis: C. V. Mosby Company, 1937.

This two volume work fills a long needed place in the field of surgery. The entire field is covered in a brilliant fashion and should prove equally valuable to the general surgeon as well as to the one interested in the special branches. Much is written concerning the "why" and the physiological reasons underlying certain surgical proceedures, phases so often neglected in texts of operative surgery. When a text merely teaches operative technic it falls far short of being of value to one interested in Surgery.

The chapters of plastic surgery alone are worth more than the price of the book. This is particularly true if one is at all interested in lowering the morbidity in Industrial and Traumatic surgery. The portion on amputations is also exceedingly well written and well illustrated. Space does not permit dwelling on each chapter but suffice it to say that each covers its allotted field in a most successful fashion.

This work should prove invaluable in that it so clearly teaches surgical principles as well as operative technic.

Preoperative and Postoperative Treatment. By Robert L. Mason, A. B., M. D., F. A. C. S., Assistant in Surgery at the Massachusetts General Hospital. 495 pages with 123 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $6.00 net.

This volume concisely yet comprehensively covers the recognized procedures in preoperative and postoperative therapy. The first twenty-two chapters discuss the general phases of the subject; the last twelve chapters deal with regional operative fields. The patient who is regarded as a good surgical risk, as well as the patient with impairments, is considered in detail. The many complications as shock, alkalosis, acidosis, ileus, and the like are adequately reviewed. The section on choice of anesthesia is considered especially valuable. Illustrations serve to enhance the usefulness of the book. This should be a frequently-consulted volume in any surgeon's library.

Personal Hygiene. By Clair Elsmore Turner, M. A., P. D. P. H., Professor of Biology and Public Health in the Massachusetts Institute of Technology; Chairman, Health Section. World Federation of Education Associations, etc. Saint Louis: C. V. Mosby Company, 1937.

The author discusses the present day knowledge of public health presenting a sufficient background of the underlying basic sciences as to permit the reader to more fully understand the principal theme. The chapter on nutrition is most informative to the lay reader. We are glad to note the statement appearing in the chapter on "Responsibility for Health Maintenance" that "In general, however, the problem of medical care is a personal one and depends upon a personal relationship existing between the individual and his physician."

THE HIGH TOLL OF LATE *syphilis* CAN BE REDUCED

"IT HAS BEEN ESTIMATED[1] that in the United States annually one-half million people with late syphilis seek treatment for the first time. . . ." It is hoped that these figures will be reduced as a result of the many publicity campaigns now under way. These patients will require careful supervision and persistent treatment.

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For literature address Professional Service Dept., 745 Fifth Avenue, New York, N. Y.

[1] Cole, Harold N., *et al.*; *J. A. M. A.* 108:22. 1937.

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MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

The International Assembly of the Inter-State Postgraduate Medical Association of North America, under the presidency of Dr. John F. Erdmann of New York, will be held in the beuatiful new public auditorium of St. Louis, Missouri, October 18, 19, 20, 21, and 22, with pre-assembly clinics on Saturday, October 16 and post-assembly clinics, Saturday October 23 in the hospitals of St. Louis.

The aim of the program committee, with Dr. George Crile as chairman, is to provide for the medical profession of North America an intensive postgraduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selection of the contributors and the subjects of their contributions.

The St. Louis Medical Society will be host to the Assembly and has arranged an excellent list of committees who will function throughout the Assembly.

A tentative list of the distinguished teachers and clinicians who will take part on the program may be found on page .... of the advertising section of this Journal.

A most hearty invitation is extended to all members of the profession who are in good standing in their State or Provincial Societies to be present. A registration fee of $5.00 will admit each member to all the scientific and clinical sessions.

For further information, write Dr. W. B. Peck, Managing Director, Freeport, Illinois.

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INTESTINAL OBSTRUCTION*

J. K. DONALDSON, M. D.
Little Rock

Intestinal obstruction is one of the most dreaded diseases in the surgical category. The general mortality throughout the country is between 50 and 90 per cent, most likely running about 75 per cent. Regardless of the fact that noteworthy adjuncts to diagnosis and treatment of the disease have been expounded during the last twenty years, there has been no appreciable reduction of its general mortality rate.

For many years the watchword in its treatment was early diagnosis and early operation. With the popularization of other therapeutic measures, temporizing procedures became somewhat more generally practiced. Men of excellent standing have, in discussing its treatment, been vociferous advocates of, among other things, concentrated saline or Hartman's solution infusions, Wangensteen's suction apparatus, enterostomy, spinal and splanchnic anesthesia. It was claimed that these measures were actually curative in themselves at times. These statements were occasionally made without any particular reference to classification of the disease. As a result of these things, it has been but natural that some confusion would arise in the minds of the profession as to just how far one might go in relying upon different procedures in an effort to prevent exploratory operation; or in an effort to safely postpone exploration until a more certain diagnosis could be made. If one reviews certain known fundamentals of the pathologic physiology of the disease and retains in his mind a satisfactory classification, this confusion becomes less marked.

Reference to Table No. I will assist in this clarification. It may be noted in this classification that all cases of intestinal obstruction are divided into two main groups. The first, or direct lumen obstruction group refers, of course, to any case in which any object such as adhesion, new growth or food bolus causes narrowing of the available gut lumen to the point of obstruction. The second group refers to those cases in which the lumen is not narrowed, but where more or less obstruction is present because of lack of motile power of the gut as occurs, for example, in post-operative ileus. There is one other additional main consideration in the table whether there is direct or indirect interference with the blood supply. A study of the table in the light of the discussion following is of assistance in allowing us to evaluate therapeutic procedures.

The Usual Two Chief Concerns in Obstruction

In considering any case of obstruction two main problems confront us. 1. Whether fluid and salt loss from vomiting are taking place. If they are, arrangements must be made to immediately replace any deficiency with the now widely used saline infusion. 2. Whether interference with the blood supply of the gut is taking place. A study of statistics and data reveals that if gangrene of the gut or severe anemia of the mucous membrane is present, we have no known method of saving the patient except by measures which will rapidly remove any gangrenous area or restore circulation to the impaired mucous membrane. The great danger of primary strangulation of the blood supply is fairly well appreciated. The great danger of impairment of circulation to the mucous membrane of the gut by distention, however, does not seem to be widely understood. This paper will not allow of detailed discussion of theory, but it seems most likely that the actual cause of death in nearly all obstructions (assuming fluid and salt loss to have been properly replaced) is intimately bound up with interference with the blood supply to the gut either through primary strangulation or by secondary interference with circulation from distention (5).

*From the Department of Surgery, University of Arkansas School of Medicine.

Other Considerations Affecting the Two Main Concerns in Obstruction

A few other points may assist somewhat in building a visual concept of the pathologic physiology of the affected intestine. 1. If a complete obstruction is simple and quite high, fluid loss is rapid and more quickly becomes an urgent factor. Distention may be less serious here than lower down because the gut may keep itself fairly empty by regurgitation through the pylorus. 2. In a simple obstruction in the large bowel fluid loss from vomiting may never become a serious matter. Distention, however, may do so, not so much from absorption as in the small gut, secondary to interference with blood supply; but because the distention may rupture one of two or three small areas in the cecum which are notoriously dangerous when impairment of circulation is present. 3. If a loop is folded upon itself and occluded, interference with its blood supply may come much earlier than if the obstruction were a simple unlooped one. 4. If gangrene is present its level is of no particular moment except as to operative technique problems. 5. If the gangrenous gut is so isolated in an incarerated hernia that toxin absorption cannot occur through its mesentery or through the peritoneal cavity, obviously general systemic pathological changes are not as rapid as if the loop were free and absorption unhampered. 6. One other consideration is that regarding the difference between venous and arterial occlusion, to be discussed later.

Mortality Statistics as Related to Time of Operation; Difficulty of Differentiating the More Benign Types of Obstruction from the More Malignant.

A review of statistics reveals the great rapidity with which damage to the system becomes fatally irreversible from interference with arterial circulation. The general mortality in obstruction is undoubtedly under 5% when the patient is operated within 12 hours of onset. It is lower when he is operated earlier and climbs with each hour's delay, being probably around 75% if operation is delayed 48 hours or more from the time of complete obstruction. If gangrene is present the patient must be operated in less than twelve hours from onset if the prognosis is to be at all favorable. After a delay of 24 hours in the presence of gangrene, nearly all die. In this connection the writer would refer to some of his previous work on obstruction in which attention was apparently called for the first time to the fact that occlusion of only the veins to a segment of gut without direct obstruction of the gut lumen being continually present, gives an entirely different picture than had been previously assumed. (2), (1). This venous mesenteric occlusion picture may simulate gangrene, but is usually not. Gangrene is not likely to develop from the venous occlusion per se. A more detailed discussion of phases of this particular part of the problem is not practical here. It is mentioned chiefly for the purpose of explaining that some surgeons have previously felt that gangrene was not so rapidly fatal after all, since they would occasionally find a very dark and badly damaged gut which had apparently been present for days, but from which the patient recovered after resection. In this type, the veins only have been completely occluded without continuous obstruction of the gut lumen. The condition is not true gangrene. Because it has been misinterpreted, it has previously been responsible for some misconception of the fundamentals of obstruction as a whole.

In closing, be it acknowledged that any therapeutic adjunct which will successfully decompress a distended gut without in itself damaging the patient is an excellent addition to our armamentarium.

Successful gut decompression can often be accomplished by a properly used indwelling nasal catheter or Wangensteen's suction apparatus. Indeed, such treatment is frequently curative in itself in post-operative or other types of ileus in which no mechanical obstruction or strangulation of blood supply call for surgical intervention. Exclusive of this type, however, one is taking a great responsibility when he postpones operation with the so-called temporizing procedures. It is very difficult for most surgeons to say that a gangrenous bowel is or is not present in a given case of obstruction. Further, it is very difficult for any surgeon to know pre-operatively whether a loop of bowel in a case of mechanical obstruction is rapidly becoming so distended that fatal irreversible damage to the entire organism may quickly ensue.

Diagnosis will not be discussed here except to say that all interested in this problem should surely be thoroughly acquainted with the great assistance the X-ray will usually give in arriving at an early diagnosis.

Summary

Familiarity with mortality statistics as they are related to time of operation; familiarity with the fact that no appreciable decrease in general mortality has occurred in the last two decades in spite of widely heralded and valuable adjuncts to treatment; and familiarity with the fundamental pathologic physiology of the gut in obstruction should make it evident that all non-intervention measures should be used only as adjuncts to surgical exploration except in the types discussed above. The earliest possible intervention seems best in all other types. When this latter practice is followed the valuable treatment contributions which have been developed will assist in lowering mortality. At present it may be, however, that these contributions have at times actually raised the mortality in some quarters because their use has been too broadly applied.

A simple classification which is briefly interpreted in the light of fundamental pathologic physiology of intestinal obstruction is presented.

TABLE NO. I

I. Direct Lumen Obstruction		II. Indirect Lumen Obstruction	
With primary strangulation of blood supply	Without primary strangulation of blood supply.	With primary interference with blood supply.	Without primary interference with blood supply.
1. Folded strangulated gangrenous loop in cavity	1. Simple high or low obstruction with no folded loop.	1. Occlusion of mesenteric arteries without direct lumen obstruction.	1. Post-operative ileus.
2. Strangulated gangrenous loop isolated from cavity as in incarcerated hernis.	2. High or low obstruction with added obstruction of folded loop.	2.Occlusion of messenteric veins without direct lumen obstruction.	2.Ileus from acute infectious diseases or from other causes without direct lumen obstruction.

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THE IMPORTANCE OF URINALYSIS*

N. B. ELLIS, M. D.
Wilson

Proper examination of the urine derives its great practical importance from the fact that through it we obtain not only an index of various changes which may be occurring in the kidney or in the genito-urinary organs, but because in the urine we also find the evidences of changed body chemistry as incident to poisoning of various sorts and the different diseases like the "metabolic disorders" which accompany improper utilization of proteins, of carbohydrates, or of fats in the body. From the fact that these numerous and widely varying changes in all or a part of the human mechanism may thus mirror themselves in the physical or chemical properties of the urine there arises the difficulty of judging properly the real significance of any given urinary findings.

The physiological and mechanical disturbances producing evidence of an abnormal urinalysis will also be discussed in this paper for this reason. The technician reports sugar in the specimen of a pregnant woman. She should not be treated as a diabetic when anything but a restricted diet should be her share. The trace of sugar was possibly due to milk sugar or perhaps she has been taking some formaldehyde producing drug such as urotropin or aspirin, under such circumstances our urinalysis becomes meaningless if we do not have a positive knowledge of our patient's physical condition and daily habits.

Since the 24 hour period is the unit cycle of our physiological existence, it is for most purposes the best unit time to choose for an examination of the quantitative and qualitative output of urine. Shorter periods, because they do not cover the daily habit of the human machine as regards work and rest, feeding, etc., are likely to be fallacious. There are, however, some important exceptions to this rule. Whenever, certain changes are more intense at one period in the day than at another a special examination at such time will give light where the examination of the 24 hour sample may have failed. Traces of sugar in a mild diabetic are most easily found an hour or two after partaking of a meal containing carbohydrates. Traces of albumin in the ordinary nephritic are most common in specimens obtained before

*Read before the First Councilor District Medical Society, Tyronza, June 18, 1936.

breakfast. On the other hand, in the orthostatic or physiological albuminurias, such traces are found in specimens voided when the patient has been up and about and through exercise has raised the acid content of the urine above the average or even night level. To obtain a 24 hour sample some hour of the day should be settled upon. Have the patient void naturally or be catheterized and discard this urine. All subsequent voidings are then collected in clean vessels. The last voiding being timed to coincide with the hour at which the 24 hour period was started.

Urine should not be preserved, but be examined as fresh as possible. A few minutes or a few hours may bring about changes in urine which will so disturb the value of a whole series of tests as to make them meaningless. Urine from an infected genito-urinary tract may through ammonicial decomposition, for example, give false readings as to acidity, urea content, presence of casts and nature of original sediment. If the urine must be preserved, cold storage is least harmful and will do much to prevent bacterial contamination. Drug preservatives may be used but they have their objections also. For instance, formaldehyde, 5 or 10 drops to the pint may be used, but a positive sugar test would be without value.

Urine is a complex of water and dissolved substances, the secretion of which is largely independent.

The secretion of water by the kidney is in essence its first function, for without such water secretion, no dissolved substances of any kind can be excreted. A GOOD WATER OUTPUT BY THE KIDNEY IS THEREFORE THE BEST EVIDENCE OF ITS FUNCTIONAL CAPACTY. The secretion of dissolved substance is secondary to this. This holds not only for the normal substances appearing in the urine, as sodium chloride and urea, but even for all foreign substances as dye used in functional kidney testing. In other words a kidney incapable of excreting water properly will never be able to properly excrete any of these dissolved substances. On the other hand a kidney may function normally and yet not properly excrete various dissolved substances. To make sure that judgment regarding a given output is not fallacious, the following physiological conditions must be borne in mind: Under physiological conditions water is taken into the body, in the case of the human being, only through the mouth, not only as water and other fluids, but as large quantities in the food, or as subsequently formed in the tissues through the oxidation of hydrogen-containing foods such as carbohydrates and fats to water. Water may, however, get into a patient by other means, namely, enemas or drips, or from the serous cavities. The water from any or all such places is absorbed into the blood and carried to different tissues of the body. ONLY A PART, AND THIS NOT THE MAJOR PART, IS LOST THROUGH THE KIDNEY. This fact is often forgotten by the physician and all manner of erroneous conclusions follow.

Water may be lost from the body through the lungs, the skin, the kidneys, and the bowels. Loss of water through the bowels may be ignored if there is no diarrhea or if cathartics have not been administered to cause loss of water. For the rest, the amount of water lost through the kidneys is dependent upon the absolute amount of free water available for excretion minus the amounts lost through the lungs and skin. For comparison, from the lungs is ordinarily lost as much or more, 63 ounces of water; and the skin pours out one-fourth to one-half as much as the kidneys, 17 to 25 ounces. The remainder from all water taken in or formed in the body goes out through the kidneys, 51 to 61 ounces.

Other things remaining constant, less urine will be lost through the kidneys if the activity of the lungs or skin is increased, and vice versa. For this reason a hot day decreases, and a cold day increases, the urinary output in normal individuals. In the sick a fall in amount of urine after the successful sweating of a patient is to be expected. The secretion of 1500 cc. or more of water by the kidneys in 24 hours justifies the conclusion that they are possessed of an adequate functional capacity. It has been proven from animal experimentation that one-eighth of the total kidney substance properly preserved will maintain all normal kidney secretion. So far as functional tests are concerned, the secretion of amounts of urine below 1500 cc. in 24 hours requires investigation, but amounts as low as 500 cc. may not mean functional incapacity of a kidney. To see if the kidneys are really at fault, give one quart of water, if the urinary output jumps up 200 cc. to 500 cc. during the next 2 hours the kidneys are not at fault. If the secretion remains low, a second quart of water may be given at the end of two hours. If the water output does not then rise, the kidney efficiency for either direct

causes, as in generalized parenchymatous nephritis, or indirect causes, as in a decompensated heart with bad circulation, may definitely be considered below par.

Urine is of a pale yellow color because of a pigment which it contains. The amount of this pigment formed in 24 hours is fairly constant, but the increase of the color goes up or down with every increase or decrease in water excretion.

The odor of normal urine is familiar to most individuals. Acetone can sometimes be smelled in the urine. Since its presence is of great importance from a diagnostic, prognostic and therapeutic point of view, it is well to make a mental note of such a finding. The smell of ammonia in the freshly voided urine indicates decomposition of the urea and is due usually to infection of the urinary passages or of the urine itself after voiding. Freshly voided urine when normal is usually clear. This is usually true in the 24 hour mixed specimen. Individual samples after meals when much acid is being poured into the stomach may be turbid. This is because the urine at this time tends to become more alkaline and so various phosphates are precipitated. Upon the addition of acetic acid the turbidity clears if due to phosphates. Even normal urine may become cloudy if chilled.

Specific gravity determinations are usually made on the 24 hour specimen of urine. For this purpose a urinometer is used. Under normal conditions the specific gravity of the 24 hour mixed sample of urine will vary between 1.010 and 1.025, not only from day to day, but from hour to hour in the same day. In alleged pathological conditions, the extremes may run from 1.002 to 1.060. Specific gravity determination upon the urine while readily made probably more often leads the physician to false conclusions than to correct ones; this is because it is too largely forgotten what physiological facts control the amount of material dissolved in the water of urine. It is in the urine that certain ultimate products of body chemistry are thrown off, plus those elements of diet which are not used in the elaboration of heat or other types of energy in the body, namely, the ash or salts taken in with our food. It is to the presence of this urea and the various salts that urine owes the fact that its specific gravity exceeds that of distilled water, or 1.000. Conversely, the specific gravity may be used to calculate the total solids in the unit volume. For this purpose the figures of the second and third decimal points are multiplied by 2.33 (Haeser's Coefficient), the answer given being the amount of solids in grams per liter. The amount of solids lost in the urine is dependent primarily upon the total food intake, for it is this which determines not only how much of various salts and urea may be produced in the body and lost through the urine, the bowel or the skin. Other things being equal, a low specific gravity or low total solid output merely means that the patient is not eating enough. Habit in water drinking may by itself be sufficient to yield a large daily output of urine with low specific gravity. Not only heavy water drinkers, but heavy drinkers of coffee, tea or beer come in this class. It would be absurd in such persons and on such evidence alone to think their kidneys affected. Cold weather with decrease in water loss by way of the skin and lung increase the water output by the kidney. Wherefore, the specific gravity of the urine in cold weather is uniformly lower than in warm weather. If a better circulation through the kidneys and a poorer one through the skin and lungs is brought about by a psychic state, as in fear or hysteria, the result is again the same, more water voided as urine and this is also of low specific gravity. Such facts will suffice to show why even when the secretion of much urine of low specific gravity is persistent, it need not yet mean chronic interstitial nephritis. When the latter diagnosis seems justified because of high blood pressure, cardiac hypertrophy and occasional casts with a little albumin confirm our suspicions, it must still be clearly kept in mind that such high secretion of water is an index of good kidney function and that if the total solid output corresponds with the intake, everything is to be looked upon as favorable so far as the kidneys are concerned. Summed up, we may therefore say that if the diet is not properly considered, all specific gravity measurements are worthless.

Acid determinations are usually made by the rural physician with litmus paper. Litmus rarely shows an alkaline reaction if ammonicial decomposition of the urine is not present unless an alkali is being fed to the patient. The acids found in urine are normal physiological products of body chemistry. In part some are abnormal. Under the first heading comes phosphoric and sulphuric acids formed from phosphorus and sulphur contained in a protein or meat diet. Thus a high protein or meat diet will give you a normally high acid urine. The usually mixed diet of man, i. e., meat, vegetables, fruits and

milk, usually yield a urine slightly acid, but should a vegetable and milk diet be substituted an overflow of alkalis may so far exceed the production of acid that a urine distinctly alkaline in reaction may be voided throughout the 24 hour period.

The abnormal acids or acetone bodies, lactic acid, beta-oxybutyric and diacetic acid, are found. We have already found out that we can reduce the phosphorus and sulphuric acidity by reducing the meat diet. Lactic acid being caused by oxygen starvation may also be reduced by improving the supply of oxygen. It is for these reasons that we order fresh air for the anemic, bed rest for the cardiac patient, and antidotes for poison cases. Beta-oxybuturic and diacetic acid are products of carbohydrate starvation or an excessive amount of fat in the diet. We can only inhibit the formation of these acids by improving the carbohydrate utilization and cutting out the fats. Sometimes it is not possible to do as much in this direction as we wish, as in severe diabetes. Proper utilization of carbohydrates fails in a large number of individuals who are in no sense diabetics but are ill in other directions, such as colitis in children, pernicious vomiting in pregnancy, or typhoid fever in the adult. Sugar starvation, moreover is induced in a large number of patients by bad feeding and since a patient is just as dead if starved to death through bad feedings as he is if he dies from diabetes, the recognition of carbohydrate starvation is of paramount. importance. Let me then implore you when in doubt as to which you shall give your patient, normal saline or glucose, take a few drops of ferric chloride, test the patient's urine, and if acetone bodies are present then by all means give glucose. The difference may mean that between life and death itself, the one exception being diabetes.

Sugar or reducing substances in the urine is a subject for a paper in itself, and will not be discussed at this time.

Albuminuria or proteins in the urine is another subject of vital importance to the patient and the doctor. Of the subject I only want to mention the origin of albumin because this one phrase "Your urine contains albumin" has been the cause of a great deal of worry and inconvenience by patients, physically and financially without just cause for same. First, the patient believes that he will soon come to the end of his days by the much dreaded disease known to the laity as Bright's disease. Therefore, to prolong his life he tries a rigid diet, changes his trade or perhaps tries a new climate and better water in his search for health. Financially, he is forever barred from obtaining insurance, or, at least, he is rated in age or amount of premium to such an extent that he feels that it is impossible for him to properly protect his family.

The physician, before telling his patient that he has albumin in his urine and that it will be necessary for him to diet, rest and take medicine, should make sure that the albumin contained in the specimen examined did not come from a lesion outside the kidney itself. You can determine this fact only by making a microscopical test of an acid urine and if you find casts you may be reasonably sure that the albumin comes from the parenchyma of the kidney.

Casts could be discussed at length if time permitted, but I want to call your attention to a personal observation in the study of casts. It is well known that you cannot make a diagnosis of any given kidney lesion by the type of casts present in the urine, but it has been my experience in treating wasting diseases like pneumonia, typhoid fever, neglected cases of malaria, colitis, etc., if you have found only an occasional cast of various kinds during the course of the disease and as the patient approaches the crisis or begins to convalesce, the urine is suddenly found full of small and large granular casts, the prognosis is death.

CORRESPONDENCE

August 18, 1937.

To the Editor:

We, of course, have had a great deal of publicity with reference to the campaign which is being waged against syphilis. However, I don't think this thing can be overdone, consequently, I am offering as a suggestion that the Arkansas Medical Society sponsor such a drive as is being put on in Chicago. That is, to offer every person in the state a Wasserman test through their family physician. The test to be done free by the state department, if necessary.

This thing will eventually be done in Arkansas and I should like very much to have it done by the Arkansas Medical Society.

Please insert this letter in the journal, provided you have the space to spare.

M. C. HAWKINS, JR., M. D.

BALANCED BUFFERED SOLUTIONS—A THERAPUETIC AID IN PEDIATRICS

IRVING J. SPITZBERG, M. D.
Little Rock

The most valuable mode of therapy to be used in the various conditions which are accompanied by depletion of the body fluids and chlorides is the use of the various buffer fluids. Hartmann's solutions, sodium lactate, molar solution, normal saline and glucose solutions in 5-20% concentrations, and the ringer solutions, all have their place.

The secret of success, in my opinion, lies both in the selection of the fluid to be used and absorbability of that solution. Most frequently, we are prone to overlook the easiest and the most efficacious route of administration, that is, the oral route. If little or no vomiting is present, by adding a small amount of glucose to either of the above mentioned solutions, we not only get faster absorption, but due to the chloride action, actually create a thirst for the fluid and enhance its palatibility.

No real results can be expected by the subcutaneous route in the infant and child, unless several sites are selected, and repeated injections are made. This calls for force at times because of the discomfort to the child. This route should not be used unless necessary.

The rectal route is not a very satisfactory one because of the usual irritability that is present in the colon, the poor absorption rate, and the large amount of the fluid needed to gain the results desired.

The intra-peritoneal route is excellent if properly and aseptically done and repeatedly used. The resultant aseptic peritonitis clears up rapidly, and the rate of absorption is rapid.

And now for the last but usually the most difficult route to use because the veins in a child or infant are small and require isolation. This method gives the quickest and most lasting results and when once secured, may be given continuously for twenty-four hours or more and in large quantities. I have seen this method of fluid administration save lives whereas other methods would not have given the brilliant results. We should use this route more.

It matters little what method one uses as to what solution and as to when the therapy is begun in relation to the onset of the illness and the amount absorbed. The one plea that should be made to all who treat children suffering from depleting diseases, is to force fluids internally, externally and eternally, and to remember that while the child is losing fluids, it is also losing chloride, which may lead to a state of, not acidosis as many think, but to alkalosis.

*Professor of Pediatrics, University of Arkansas School of Medicine.

FALL CLINICAL CONFERENCE OF THE KANSAS CITY SOUTHWEST CLINICAL SOCIETY

A most interesting and instructive program for the Fall Clinical Conference of the Kansas City Southwest Clinical Society to be held in Kansas City, October 4 to 7, is nearing completion. The four afternoon sessions will be devoted entirely to presentations by guest speakers, some of whom will also participate in the programs of the two sections to be presented each morning by members of the society.

Two sectional sessions will be held each entire morning which will include discussions of medicine, industrial surgery, obstetrics and gynecology, pediatrics, syphilis, urology, surgery and proctology. Speakers for discussions have been particularly chosen by the program committee for each lecture and an excellent program can be expected.

Guest speakers for the conference include Dr. Alfred E. Barclay, Oxford, England; Sir George Lenthal Cheatle, London, England; Dr. R. B. Cattell, Boston; Dr. Frederick A. Coller, Ann Arbor; Dr. Wm. D. Gill, San Antonio; Dr. Arnold Jackson, Madison; Drs. Richard H. Jaffe, Herman L. Kretschmer and Paul B. Mangnuson, Chicago; Dr. G. D. Royston and Father A. M. Schwitalla, St. Louis; Dr. Ferris Smith, Grand Rapids; Dr. Fred M. Smith, Iowa City; Dr. Robert A. Strong, New Orleans; Dr. O. H. Wangensteen, Minneapolis, and Dr. Bernard L. Wyatt, Tucson.

The Fall Conference promises to be the most attractive in the history of the society and warrants a full attendance.

COMING MEDICAL MEETINGS.

Kansas City Southwest Clinical Society, Kansas City, October 5-8th.

Third Councilor District Medical Society, Brinkley, October 6th, 1937.

Fifth Councilor District Medical Society, Camden, October 7th.

Fort Smith Clinical Society, Fort Smith, October 12th.

Interstate Post Graduate Medical Association of North America, Saint Louis, October 18-22nd.

Oklahoma City Clinical Society, Oklahoma City, November 1-4, 1937.

Southern Medical Association, New Orleans, November 30-December 3, 1937.

Arkansas Medical Society, Texarkana, April 18-20, 1938.

American Medical Association, San Francisco, June 13-17, 1938.

AN UNUSUAL COMPLICATION FOLLOWING A CALDWELL-LUC OPERATION*

T. E. FULLER, M. D.
Texarkana

Complications following radical operations upon the maxillary sinus are fortunately infrequent. You are familiar with them and it would be an imposition on the time of a group like this to enumerate them.

I have consulted the literature which is available and have discussed the subject with various men who are authorities in the field of sinus surgery. Nowhere in the literature have I found any reference to the complication about to be described and none of the men with whom I have discussed the case has ever seen it.

The patient was a female, aged 35, not very robust, but in reasonably good health. She presented herself at the office May 1, 1935, stating that ever since she had some teeth pulled two weeks before she had suffered pain in the left side of her face and there was an offensive discharge from the left nostril. Examination of the mouth showed that the site of the removed teeth had healed and there was nothing unusual to be found. Examination of the nose showed considerable pus in the left middle meatus. Examination of the right side of the nose was negative as was the throat. Transillumination of the sinuses showed them to be clear with the exception of the left maxillary which was densely cloudy. These findings were confirmed on X-ray examination. The antrum was punctured under the inferior turbinate and irrigation brought away a large amount of very foul pus.

These irrigations were done regularly until the 26th of June, but with very little improvement. The discharge was still foul and profuse and the discomfort had increased. On June 27 a Caldwell-Luc operation was done under a general anesthesia. The usual technique was followed and a large amount of bone in front was removed. The sinus was found filled with pus. The mucous membrane was thick and degenerated and, in some places, necrotic. This was carefully removed and a large opening made under the inferior turbinate. The incision was closed with cat-gut.

The operation consumed about an hour. There was nothing unusual in the post-operative history. Only a moderate degree of reaction followed. The patient left the hospital on June 29 and came to the office on July 1. She came occasionally until July 11 which was the last time we saw her at which time the reaction had subsided and the discharge lessened, in amount and the odor gone.

We did not see the patient again until May 25, 1936, at which time we found the complete atrophy of the soft tissues of the face on the left side. There had been no inflammation or discomfort, but the contour of the face had gradually changed until there was nothing left on that side except the skin and bone. The patient's attitude was very reasonable, but the appearance was anything but pleasing.

In looking around for an explanation as to what had happened the possibility of a non-suppurative inflamlation of the soft tissues was suggested, but in view of the fact that there had been no unusual reaction and that this had subsided promptly, I rather doubt this.

Although I feel that the condition described must have been a result of the operation, no unusual trauma was done to the soft tissues by the retractors. There is a trophic condition of the face known as facial hemi-atrophy. The changes involve the skin, subcutaneous tissue and muscle and bone. It is said to begin early in life, usually in the second decade. The atrophy usually begins in a small area and spreads until it involves the entire half of the face. The course is usually progressive. It may stop after a small amount of atrophy has taken place or it may extend beyond the face and involve the neck and even the arm. No one seems to know exactly what causes this condition. Infectious diseases sometime precede it and pulmonary tuberculosis is frequently present. Local infections may play some part. Among those mentioned are alveolar abscesses and tonsillitis. In some cases it has followed the extraction of teeth and general trauma.

As the description of this condition applies very perfectly to the case under consideration, I am inclined to think that the trauma at the time of the operation set up this process and that we might be entirely justified in calling this a case of facial hemi-atrophy. At least, that is my impression of it.

*Read before the Section on Opthalmology and Otholaryngology, Arkansas Medical Society, Little Rock, April 13, 1937.

"The state, in medicine and surgery . . . can do only a relatively small part of the necessary and essential work. State activity, no matter how well administered, can never successfully take the place of the private practitioner or the privately endowed institution."—Gov. Lehman.

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EDITORIAL

THE RELATIONSHIP BETWEEN THE ARKANSAS MEDICAL SOCIETY AND THE RESETTLEMENT ADMINISTRATION

As a result of conferences held between officials of the Resettlement Administration in Arkansas and a special committee from the Council of the Arkansas Medical Society, an agreement has been drawn and agreed to by both parties. This is now presented for the information of the membership of this Society and, in particular, for county medical society officers. The Committee from the Council feels that this is a most definite advantage gained for organized medicine and evidences proper cooperative spirit from the governmental agency. County medical societies are urged to give this their prompt consideration and to arrange for their participation in the furnishing of adequate medical service to clients of the Resettlement Administration in full accordance with the agreement. We feel that the opportunity now exists to demonstrate in a convincing way the value of organized medicine. The provision of adequate, private medical service to the individual patient is insured without undue intervention of any third party. This is the aim of organized medicine. Upon the county medical societies now rests the responsibility of safeguarding the rights and privileges of organized medicine by taking full care that proper medical attention is furnished with a minimum of friction and with full satisfaction to the patient, the individual physician, and to the Resettlement Administration.

MEMORANDUM OF UNDERSTANDING BETWEEN THE OFFICERS AND MEMBERS OF THE ARKANSAS MEDICAL SOCIETY AND THE RESETTLEMENT ADMINISTRATION AND AFFECTED PARTIES

This is a statement of policy determined upon and recommended by the Council of the Arkansas Medical Society and the Resettlement Administration in the matter of formation of medical cooperatives for farmers of low income who are clients of the Resettlement Administration in the State of Arkansas.

The clients of the Resettlement Administration are farm families living in rural areas of the State. Some of these families live on adjoining farms, on Resettlement projects, while the majority of them live on individual farms varying in distance from each other.

These families are citizens of the State with an agricultural background who have been approved as worthy of financial aid and assistance by committees composed of five leading citizens in each county. They are families who through several years of depression, misfortune or lack of good management, have exhausted all their personal means and financial security.

Small loans are being advanced by the Resettlement Administration to these families. The amount of the in-

dividual loan is based on the anticipated income of the family. A farm and home plan for each family is worked out through the cooperation of the family and the local representatives of the Resettlement Administration in each county.

By cooperative and more intelligent planning under the direction of trained agricultural leaders and with the necessary financial assistance, it is expected that these families may more reasonably and more comfortably live, repay the money borrowed from the United States Government, and become independent self-supporting families.

It is recognized that medical service is one of the paramount needs of these families and that heretofore such services have been obtainable largely at the expense of the medical men serving the communities where they resided.

It is the desire of the Resettlement Administration that each of these families be provided adequate medical care and that the attending physicians be satisfactorily remunerated for their services.

It is also the desire of the Resettlement Administration to give full consideration to the principles of ethical practices and fair dealings proposed by the members of organized medicine. The Resettlement Administration pledges its best efforts to maintain for the client the right to choose any legally authorized physician reasonably available and the right to discharge any physician with or without cause.

The Resettlement Administration will in all counties, where there is an established medical society, accept the dictations of that organized Medical Society in the distribution of such funds as are allotted for medical services, provided that that county medical organization will pledge themselves and their best efforts to give such medical services as these clients demand. In such counties who have no organized medical group, it is assumed they will be under the direction of the officer of the councilor district of which they are a part and such arrangement will be made with the authorized officers of that district on the same basis as is made with counties having organized medical societies.

In order that compensation may be made equitable, the officers and members of the Medical Society offer this policy; that all bills for services rendered in any stated area be reviewed by an officer of the Medical Society, the fairness of the bill decided by him and authorized for payment on a percentage basis from the funds set apart as the cooperative funds for medical services as contemplated above. It is expected that all doctors will submit at the end of each month or after the performance of a stated service, their bills for services rendered, the amounts thereof to be determined according to the custom and usual professional charges in the community, all of which bills shall be submitted to the officer designated by the Society, who shall review the same to determine its fairness and place the same in line for payment. At the end of the calendar month such bills as have been submitted will be paid from the funds available for that month on a pro-rata basis. Should there be an amount due and payable the doctor over and above the amount paid, said amounts shall be considered to have been paid in full and the accounts satisfied for that month. Should there be a residue in the fund after the payment of submitted bills for the calendar month, then such funds shall accrue to the succeeding month and shall thereafter be applied as bills are submitted therefor.

It is understood the physicians will render to the clients the same degree of care available to other patients in the county; that the attending physician will furnish all common drugs prescribed by him for cases of ordinary or common sickness.

It is further understood that a reasonably proportionate part of the available funds in each county will be set aside to be used in paying for emergency antitoxins, major operations and hospitalization.

In case of grievances or over charge of accounts, full statement of the charges, if any, or complaints, shall be made to the reviewing official and shall be determined by him as to equity and his ruling shall be final.

A. M. ROGERS,
State Director of Rural Rehabilitation.

S. B. HINKLE, M. D.,
Chairman of the Advisory Committee.

FIRST SUPPLEMENT TO THE U. S. P. XI RELEASED

The following announcement has been received in the Journal office from E. Fullerton Cook, Ph.M., Chairman of the U.S.P.XI Committee of Revision:

"The first supplement to the Eleventh Revision of the United States Pharmacopoeia has just been released and will become official on December 1, 1937. It is a booklet of about one hundred pages in a substantial binding, and may be obtained from the Mack Printing Company, Easton, Pennsylvania, from your wholesale druggist, or from any other distributor of the U. S. P., at one dollar a copy, postpaid.

"This supplement was prepared under the same careful procedure followed for the original text. Each proposed change was carefully investigated by the appropriate subcommittee and submitted for the consideration of the Revision Committee. The tentative text was then given wide distribution to solicit criticisms and suggestions. A hearing, conducted by members of the Executive Committee, was later arranged and announced, and everyone interested was invited to be present. Following the hearing the members of the Executive Committee held a conference with the officials of the Food and Drug Administration at Washington and then decided upon the text, which was then submitted in full to the members of the Revision Committee for discussion and approval. Finally the Board of Trustees decided the date of issue for the supplement, also the date when it is to become officially a part of the U. S. P. XI, and the price for which it is to be sold.

"The issuance of the first supplement to the Eleventh Revision inaugurates an advanced program in American pharmacy. This makes possible the prompt revision of tests or assays whenever it is found necessary, and even the recognition of added therapeutically important substances, if new conditions make such action desirable. This plan will make the Pharmacopoeia more responsive to progress, more serviceable as a technical guide to the health professions, and more dependable as an authority for drugs and medicines under the federal and state pure food and drugs acts.

PROCEEDINGS OF SOCIETIES

The Tri-County Clinical Society met at Hope August 26th for the following program: "What the General Practitioner Should Know About the Ears," R. V. Russell, El Dorado; "The Proper Splinting, Management and Care of Infantile Paralysis," Vernon Newman, Little Rock, and "Present Status of the Treatment of Poliomyelitis, Immunization Against Acute Infectious Diseases," A. C. Kirby, Little Rock.

J. W. BRANCH, Secretary.

The Randolph-Lawrence County Medical Society met at Pocahontas August 10th and was addressed by R. H. Willett, Jonesboro, "Cancer and Its Treatment," and by A. M. Elton, Newport, "Hernia" (with motion pictures). The scientific session was followed by a banquet.

The Ouachita County Medical Society met in dinner session at Camden September 2nd for the following program: "Acute Osteomyelitis," Vernon Newman, Little Rock, and "The Crippled Children's Program in Arkansas," Robert Milliken, Little Rock.

The Mississippi County Medical Society met September 7th at Blytheville Hospital for the following program: "Vitamins in Relation to Disease," Lyle Motley; "Intracranial Tumors in Children," Eustace Semmes, and "Some Practical Points in Urologic Diagnosis," Thos. D. Moore, all speakers from Memphis.

F. D. SMITH, Secretary.

The Randolph-Lawrence County Medical Society met in joint session with the Independence County Medical Society at Cave City, September 14th, for the following program: "Symposium on Poliomyelitis," conducted by W. B. Grayson, Little Rock, and "The Acute Abdomen," T. C. Guthrie, Smithville.

CHAS. D. TIBBELS, Secretary.

The Tri-Parish Medical Society was addressed at Lake Providence, Louisiana, recently by S. W. Douglas, Eudora, "Medical Fads and Fancies," and J. H. Burge, Lake Village, "Infections of the Hand."

The Independence County Medical Society was addressed August 10th by O. J. T. Johnston and L. T. Evans.

The Sebastian County Medical Society was addressed September 14th by S. D. Neely, Muskogee, on "Prostatism."

L. M. HENRY, Secretary.

PRONTLYN

In the treatment of patients with sulfanilamide, a careful watch for the development of cyanosis is not sufficient precaution against sulfhemoglobinemia; in addition the total hemoglobin should be determined and the patient's blood examined at regular intervals of every few days. The possibility of an unrecognized occurrence of sulfhemoglobinemia should be borne in mind and the administration of magnesium or sodium sulfate to patients under treatment with sulfanilamide probably should be forbidden until more information is available. Jour. A.M.A., April 17, 1937.

NATIONAL SAFETY COUNCIL CONGRESS, OCTOBER 11-15, 1937

The medical profession has become so interested in the prevention and cure of disease that it has overlooked a situation which influences mortality statistics in this country. In short, death from accidents in 1934 ranked third in causes of death in the United States, ahead of pneumonia, cerebral hemorrhage, nephritis, and tuberculosis. What have we gained in saving lives by prevention and cure of disease, when these "saved" patients later die of some accident? It is appalling to note that during the year 1935 hourly there were 11 deaths and 1100 injured, or a total for the year of 100,000 deaths and 9,340,000 injured. In fact, the number of American soldiers killed in the World War is only half as great as the number of persons killed by accidents in 1935.

This problem of safety measures is very vital to the doctor, not only as it concerns his patients whose welfare is in his hands, but himself and his family as well, since they become candidates for accidents not only from their own negligence, but from the negligence of others. It therefore behooves the doctor to become "safety conscious." Make it a point to attend this Safety Congress in Kansas City, and to take part in its various activities. The date is October 11th through the 15th.

OBITUARY

GEORGE H. SIMMONS, Editor and General Manager Emeritus of The Journal of the American Medical Association, died in Chicago September 1st following an operation on August 25th, from which he failed to rally.

Doctor Simmons was born in Moreton, England, Jan. 2, 1852. He came to the United States in 1870, and studied at Tabor College in Iowa in 1871 and 1872 and at the University of Nebraska from 1872 to 1876. He received his M.D. degree from the Hahnemann Medical College, Chicago, in 1882 and was awarded the M.D. degree by Rush Medical College, following additional study, in 1892. In 1884, previous to his study at Rush Medical College, he served in the Rotunda Hospital in Dublin. From 1884 to 1899 he practiced medicine in Lincoln, Nebraska. In 1896 he established the Western Medical Review, acting as its editor, and from 1895 to 1899 he was secretary of the Nebraska State Medical Society and also secretary of the Western Surgical and Gynecological Society.

In 1899, when the Board of Trustees of the American Medical Association was in search of a secretary for the organization and an editor for its periodicals, a number of leading figures in the medical literary and political world were given consideration. They appeared before the Board of Trustees, many of them with strong endorsements. After long consideration the Board of Trustees chose Dr. George H. Simmons for the position of General Secretary, which he filled from 1899 to 1911, and of editor, which he occupied until 1924. In 1901 he became also general manager. Before its reorganization in 1901 the American Medical Association was not a truly representative body, and the method of administration of its professional affairs and its business were, to say the least, disorganized. When Doctor Simmons became Secretary in 1899 he initiated the movement which led to the appointment of a committee of which Dr. J. N. McCormack of Kentucky was chairman and he secretary to consider ways and means of reorganization. At the meeting of the Association in St. Paul in 1901 the general principles and policies outlined in the Constitution and By-Laws presented by that committee were adopted. The present plan of organization of the American Medical Association is largely due to the work of that committee.

The Journal of the American Medical Association was established in 1883. When Doctor Simmons took over the editorial supervision and management, its total subscription list was approximately ten thousand. From that time it showed continuous improvement. Furthermore, under his leadership it became a significant weapon in the initiation and progress of great movements for the advancement of medical education and medical science. In 1901 The Journal began the annual publication of information concerning the medical schools of the country. In 1903 it undertook publication of the results of the examinations of graduates in medicine for licensure by state examining boards. The next step was the organization of the Council on Medical Education and Hospitals in 1905. At the same time the Council on Pharmacy and Chemistry was developed, and in association with it the chemical laboratory and the Department of Propaganda for Reform, which eventually became the Bureau of Investigation. Thereafter came other councils and departments which were logically an outgrowth of the developments that have been mentioned. In the field of publication The Journal was supplemented by, the American Medical Directory, which was an outgrowth of the Biographic Department; the various Archives: of Internal Medicine, of Neurology and Psychiatry, of Dermatology and Syphilology and of Survery; the American Journal of Diseases of Children, and many other publications. It occurred to Doctor Simmons to begin publication of a quarterly cumulative index of leading medical publications as a means of providing physicians with up-to-the-minute references to medical periodical literature in an easily accessible form. The success of this publication was so great that it eventually was combined with the Index Medicus into the Quarterly Cumulative Index Medicus. Hygeia, too, was initiated under Doctor Simmons' leadership as General Manager. To tell the story of Doctor Simmons' service in the period from 1899 to 1924 is, in fact, to tell the history of the American Medical Association in that same time.

In 1908 he was commissioned a First Lieutenant in the Medical Reserve Corps of the United States Army; in 1917, when the United

States entered the war, he was made Major in the Medical Reserve Corps, and served diligently in the Personnel Division. In 1921, by order of President Harding, he was awarded the Distinguished Service Medal.

As an editor, Dr. George H. Simmons was alert and fearless. His attacks on quackery and fraud in the field of medicine brought on his unwearying head and shoulders the counter attacks of those who saw their unscrupulous exploitations exposed and their incomes discontinued. It was his policy never to reply to any of the personal attacks made on him in the course of his service. Innumerable medical writers could testify to the manner in which he devoted himself personally to the education of younger men in editorial technic. His personal writings were few, but much of what he wrote and developed appeared anonymously in the pages of The Journal. His published papers include, however, one on medical education and preliminary requirements, which appeared in The Journal, June 2, 1906; one on the commercial domination of therapeutics and the movement for reform, and another under the title "What the American Medical Association Stands For." In 1914 he read a paper before the Southern Medical Association, entitled, "Work of the Council on Pharmacy and Chemistry: Its Effect on Medical Progress"; and as president of the Institute of Medicine of Chicago, which position he held in 1921, he read an address under the title, "Medical Periodical Literature."

In 1924 he resigned as Editor and General Manager of the American Medical Association and became Editor and General Manager Emeritus. At that time a number of leaders in American medicine arranged for the painting of his portrait, which was presented to him at a testimonial banquet in Chicago on June 9, 1924. Hundreds of physicians attended, and he received messages of appreciation and congratulations from all over the world.

This, then, is briefly the record of Dr. George H. Simmons as an executive and an administrator. His work for the American Medical Association was characterized by intelligence, unselfishness, initiative and righteousness. In his personal life he had his share of physical and mental suffering. He weathered storms of unjust criticism and false characterization of his administration. He devoted himself almost objectively and completely devoid of personal interest to the public career which he had chosen. Unquestionably he was the greatest factor in his generation in the development of the American Medical Association and the profession that it represents.

After his retirement he traveled extensively for several years. Since that time he has resided in Florida, but has spent some time every other year in Great Britain and in the intervening years in Chicago, frequently coming to the headquarters office and making available to his successors the experience of years and the brilliant insight which he brought into medical problems. The medical profession of the United States owes him a debt which it could never pay and which he never wished to collect.

COOLEY S. ELLIS, aged 61, died at his home in Lonoke, September 4th. Born at Pleasant Plains, he graduated at the Louisville Medical College in 1905 and first practiced at Oil Trough, Independence county, later moving to Hazen, where he lived for 13 years. He moved to Lonoke in June, 1937. In addition to his membership in the Lonoke County Medical Society, the Arkansas Medical Society and the American Medical Association, he was a member of the Masonic lodge and of the Baptist church. Surviving relatives are his wife and two sons.

JOSEPH McDOWELL BREWER, aged 77, died at his home in El Dorado August 27th. A graduate of Vanderbilt University School of Medicine in 1882, he had practiced in El Dorado for the past 21 years. In addition to his membership in the Union County Medical Association, the Arkansas Medical Society and the American Medical Association, he was a member of the Odd Fellows Lodge and the Methodist Church. Surviving relatives are his wife and two sons.

GEORGE HICKS MARTINDALE, aged 70, died at his home in Hope September 9th. Born near Nashville, he graduated from Chattanooga Medical College in 1899 and had practiced in Hope for many years. He was a past president of the Hempstead County Medical Society and had served as county health officer for the past 10 years. Surviving relatives are his wife, three sons, one of whom, Dr. J. G. Martindale, is now engaged in practice at Hope, and four daughters.

PERSONALS AND NEWS ITEMS

O. A. Jamison has been elected 2nd vice-commander of the Newport post of the American Legion.

J. W. Branch is constructing a seven-room clinic building at Hope.

H. Fay H. Jones and Raymond Cook, Little Rock, J. C. Ogden, Fort Smith, and Fount Richardson, Fayetteville, have returned from postgraduate study in Europe.

MARRIED—On August 29th at Little Rock, D. A. Rhinehart and Miss Luck Rowena Askew. The couple took a wedding trip to Mexico.

L. R. Brown, formerly superintendent of the State Hospital, assumed the post of superintendent of the Texas State Psychopathic Hospital at Galveston, September 15th.

Dr. and Mrs. Homer Scott, Little Rock, spent an August vacation in Mexico.

J. B. Jameson has been reelected president of the Panther Booster Club at Camden.

J. E. McGuire, Piggott, has been appointed Clay County chairman for the state tuberculosis association.

"The Spa Treatment of Arthritis," by W. T. Wootton, Hot Springs National Park, appeared in the September issue of the Southern Medical Journal.

Recently elected post surgeons of American Legion posts are the following: Ira Ellis, Monette; H. C. Dorsey, Fort Smith; W. J. Hunt, Warren, and H. E. Longino, Texarkana.

E. V. Dildy has been elected to the Board of Governors of the Nashville Athletic Club.

C. H. Kennedy, Fort Smith, spent an August vacation on motor tour through the West.

The State Department of Welfare has announced the appointment of the following technical advisory committee to the crippled children's division: D. A. Rhinehart, Little Rock; Joe F. Shuffield, Little Rock; H. A. Stroud, Jonesboro; W. G. Eberle, Fort Smith; J. H. Burge, Lake Village; R. B. Robins, Camden, and W. B. Grayson, Little Rock.

MARRIED—On August 18th, Dr. Joe F. Rushton and Miss Elizabeth Ponder at Magnolia.

O. J. T. Johnston has been elected surgeon of the Batesville American Legion post.

Earle Hunt, Clarksville, has been elected vice-president of the Mayflower Dairy Company, North Little Rock.

J. W. Amis and Chas. T. Chamberlain, Fort Smith, spent an August vacation at Dallas and Fort Worth.

K. W. Cosgrove, Little Rock, has been appointed supervising ophthalmologist under the program for aid to the blind of the state Department of Public Welfare. The following district supervisors have also been appointed: District No. 1, J. M. Wallace, Fayetteville, H. J. G. Koobs, Rogers; District No. 2, C. G. Hinkle, Batesville; District No. 3, O. T. Cohen, Jonesboro; District No. 4, J. A. Saliba, Blytheville; District No. 5, E. C. Moulton, J. C. Ogden, L. M. Henry, Fort Smith; District No. 6, L. Gardner, Russellville; District No. 8, Virgil Payne, Pine Bluff; District No. 9, H. H. Rightor, A. W. Cox, Helena; District No. 10, J. Mac Laughlin, Z. N. Short, Hot Springs National Park; District No. 11, R. R. Kirkpatrick, T. E. Fuller, L. H. Lanier, Texarkana; District No. 12, C. S. Early, Camden; District No. 13, J. G. Mitchell, El Dorado; District No. 14, V. C. Binns, Monticello.

A. C. Shipp, Little Rock, addressed the Southern Tuberculosis Conference at Richmond, Virginia, October 2nd on "Hospitalization in a Coordinated State Tuberculosis Control Program."

W. O. Arnold, Fort Smith, recently addressed the Noon Civic Club of that city.

J. E. Stevenson, Fort Smith, attended the Grand American at Vandalia, Ohio, in August.

Dr. and Mrs. B. A. Rhinehart and Dr. and Mrs. K. W. Cosgrove, Little Rock, spent an August vacation at Biloxi.

Dr. and Mrs. H. A. Higgins, Little Rock, visited Western and Canadian points in August.

The Lake Village Infirmary has just completed an addition which doubles its capacity, the entire hospital now being air-conditioned.

A. J. Harrison has been appointed a member of the Board of Commissioners of Paving District No. 7 at Springdale.

The following medical reserve corps officers were on duty during the summer training period: Lt. Col. Pat Murphey, Little Rock; Major B. V. Powell, Camden; Major Joe H. Sanderlin, Major Sloan M. Sanford, Major Joe Shuffield, Capt. K. W. Cosgrove, Capt. J. S. Levy, Lt. E. C. Gay, Lt. John M. Samuel, Little Rock; Capt. W. S. Riley, El Dorado; Lt. Van. C. Bins, Lt. S. W. Chambers, Monticello; Lt. F. S. Dozier, Clarendon; Lt. R. E. Schirmer, Blytheville, and Lt. John M. Smith, Morrilton.

RANDOM THOUGHTS OF THE SECRETARY

August 12th. This evening and many another we spend giving typhoid vaccine to that contingent of the National Guard looking forward to the Fort Riley encampment, the rookies in keen satisfaction; the veterans, as a job to do. For us, we can express thanks that our 1937 soldiering was done under the more peaceful and less torrid surroundings of Fort Barrancas.

August 15th. Our services are engaged in a new capacity this day; we play canteen maid to a troop train passing through Van Buren, Phil Thomas and Stanley Gates having disputed the entire distance from Little Rock as to who is the medical officer on duty, an unsought privilege.

August 22nd. With vexation we pass another lonely Sunday; a day of inaction and lots of it. Doubtless we could bestir ourself and do any number of those things which we have yet to perform, yet the all-consuming ambition for accomplishment is completely lacking.

August 26th. We act as hostess for a summertime widower; at Wolfermann's we endeavor to act gracious for a delightful dinner party.

August 27th. Personal to C. K. Townsend, Geo. B. Fletcher and I. F. Jones: This time we go to Boulder direct, with that city as our objective, no short cuts from Atlantic City or to Pensacola.

August 28th. Cool Colorado lives up to its name; our linen suit gathers wrinkles in the bag; a fire, built by these unaccustomed hands with expensive Colorado firewood, is most desirable. Spending no inconsiderable portion of our leisure moments discussing with harassed mothers the poliomyelitis epidemic, yet wondering at the reactions of those twenty families who fled the disease at Dallas but to find a greater incidence in a town scarcely thirty miles away.

August 30th. En familie, we dine at Denver's Blue Parrott, the youngster's favorite restaurant. And with the coming of 3:15 p. m. we depart, totally unaware that we shall lie in wait some three hours just out of Colorado Springs, a sudden cloudburst having removed all that is solid from beneath the Rio Grande's rails. Listening with the rest of the massed passengers as Farr gives it to Louis, realizing that, after all, radio announcers are not entirely free from prejudice, and that what seemed to be the Welshman's fight could, in all accuracy, be correctly decided in favor of the brown one.

September 1st. From our mail we pick an epistle from one H. Fay H. Jones, which hints at his cognizance of European customs and the like, reminding us of that classic anecdote which terminates: "Yes, too late, twenty years too late."

September 4th. With rain and a Labor Day holiday about upon us, it would appear unlikely that clients will pass our portals, a prophecy of ours entirely correct, for the once.

September 9th. This evening engaged in mathematical studies, our greatest pleasure derived not from the figures but from side-line comment to and about Jones, who finds that sometimes all is not as it seems.

September 10th. We sponsor Arnold at our civic club and are pleased that he capably fills the role of a speaker on tuberculosis.

September 14th. This evening one Shade D. Neely with his supporting audience of Ed White, Brown Oldham and M. K. Thompson talks to the county society on prostatism, a well-presented discussion, but more impressive to us as a model of the type of talk which advises the listeners that they are quite capable of handling these cases, and at the same time cautions the boys not to try "my specialty, or woe be unto you."

TO AMERICA'S SCHOOLS—YOUR HEALTH

Once more, during the coming fall, winter and spring, the Voices of Medicine will salute the people of America, with the toast "YOUR HEALTH." This is the well-known title of the radio program of the American Medical Association and the National Broadcasting Company. The coming season will be the fifth; the first two years were devoted to health talks, and the last two seasons to dramatized health messages. This year, the salutation will be addressed particularly to the teachers and students in the Junior and Senior high schools, in the hope that the program will be helpful in illustrating, amplifying, and enriching the health teaching in those schools. The program will be on the air while schools are in session, so that the program may be utilized directly in the thousands of schools which now have or soon will have radio and public address systems reaching the class-rooms. Programs will be announced in advance in HYGEIA, The Health Magazine. While the program is planned especially for high schools, it will not sacrifice the interest which it has held for listeners in the home. To teachers, students and stay-at-homes, the American Medical Association and the National Broadcasting Company will address their message of health education with the familiar musical theme HALE AND HEARTY, written especially for the program, and the toast, "To America's Schools, YOUR HEALTH!"

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

Dear Auxiliary Members:

As second vice-president of the Woman's Auxiliary to the Arkansas Medical Society, early in September I mailed material for Health Education programs to the County Auxiliary presidents in accordance with recommendations adopted at the National Convention in Atlantic City.

It is the aim of the Auxiliary to promote Health Education through programs which meet the needs of their respective states and counties. In our own state many counties now have a full-time health unit, and it seems to me that one of the most important contacts that we of the Auxiliary could make in furthering the Health Education program would be to visit the director of these units, pledge our support to his program; then help when an occasion arises.

The mediums most available to local Auxiliaries for Health Program publicity are newspapers, speakers bureaus, pamphlets, and, in some instances, radio. The first named medium, newspapers, will, in most instances, use timely news items and pictures. It is claimed that educational material alone is not interesting to the average reader. By exercising some ingenuity educational matter can be incorporated in news stories—and pictures help! News stories should be offered to the press regularly to establish the society as the source of medical news.

Speakers' bureaus can be organized in any community with a medical society. Speakers should give accepted opinions as their topics, not individual ideas. Audiences already assembled, as in men or women's clubs, offer the best assurance of larger numbers and receptive minds.

Pamphlets are useful for distribution in connection with talks, through doctor's waiting rooms and from the health unit.

Radio is a good medium where available. Radio time is customarily extended gratis to medical societies. Dramatizations or interviews are preferable to talks. The talk should convey only one basic message, with a bit of humor, and perhaps a touch of pathos.

County Auxiliary program chairmen should familiarize themselves with health materials which may be used for debates or essay contests among school children and in conjunction with P. T. A. health programs and health institutes.

For "self education" (as pertaining to health) I would urge every Auxiliary member to have a physical examination every year and use this as a talking point, for only through prevention, early diagnosis and treatment will any health program overcome disease.

Every state and county chairman should read, and encourage her co-workers to read the national and state medical journals. Hygeia, the official magazine of the American Medical Association for the laity, is recommended as excellent reading. Hygeia clipping service is available to Auxiliary members. Clippings may be kept for ten days. Health plays, printed in Hygeia, will furnish an interesting program.

Health exhibits for lay organizations and county or state Auxiliary meetings are available and may be borrowed. They are considered helpful in the study of health problems.

There was never a time when the program of health education met with such whole-hearted approval as now. Practically every civic, religious, and serious club organization has a department that gives special thought to the great work. The lead should certainly come from the Auxiliaries of the medical societies.

With best wishes for a successful year, I am,

MRS. O. J. T. JOHNSTON.

Dear Auxiliary Members:

September marks the passing of summer and the time to give serious thought to our Auxiliary work, putting to test those plans we have formulated during vacation and rearranging them to coincide with the suggestions from National. In doing this, I can't urge you too strongly to keep in close touch with your State Chairmen of Committees—the closer the contact, the finer the coordination and greater the accomplishment.

We are all familiar with our "aims" as set forth in our constitution. Extending the aims of the medical profession, informing laymen in matters of Health Education and promoting Hygeia should come first, but we should be cognizant of another objective of our organization, that of the promotion of acquaintanceship between doctors' families. By this contact, we not only enrich our characters, and enlarge our circle of friends, but we are storing up treasures that will mean much to us in the passing of time.

The Fall Board meeting will be held during the last week of October. (You will receive official announcement later.) I want all County Presidents, Chairmen of Committees, Officers, Directors and District Chairmen to make a great effort to come. Those of you with new ideas, and those with old ones that need to be brought to our attention, come prepared to tell us about them. Let's have a real inspiring meeting and pull together to make this a successful Auxiliary year. Sincerely,

(MRS. CURTIS W.) ROSINA JONES.

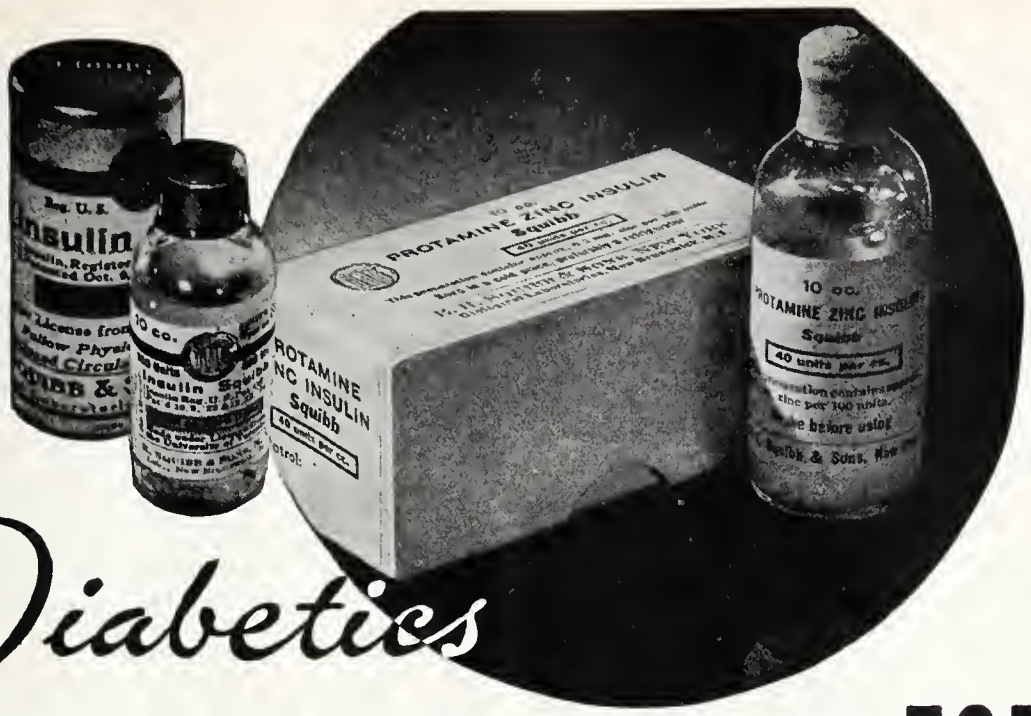
EXAMINATIONS—AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The next examinations (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada on Saturday, November 6, 1937, and Saturday, February 6, 1938. Application for admission to these examinations must be filed on an official application form in the office of the Secretary at least sixty days prior to these dates.

The general oral, clinical and pathological examinations for all candidates (Groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13 and 14, 1938, immediately prior to the meeting of the American Medical Association.

Application for admission to Group A examinations must be on file in the Secretary's Office before April 1, 1938.

For further information and application blanks address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, (6), Pa.



Diabetics LIVE LONGER TODAY

THE LIFE SPAN of the diabetic has been lengthened considerably following the discovery of Insulin and the growing knowledge of its use. There is, however, a definite responsibility on the part of the physician to educate the many new diabetics in the importance of proper diet and proper use of Insulin preparations.

The apparent increase in diabetes in recent years has been attributed to the modern manner of living, increased sugar consumption, overeating and lack of muscular exercise. With proper management the great majority of patients can be kept well-nourished, sugar-free, and at work.

Insulin Squibb is an aqueous solution of the active anti-diabetic principle obtained from pancreas. It is accurately assayed, uniformly potent, carefully purified, highly stable and remarkably free of pigmentary impurities and proteinous reaction-producing substances.

Insulin Squibb of the usual strengths is supplied in 5-cc. and 10-cc. vials.

Protamine Zinc Insulin, *Squibb* complies with the rigid specifications of the Insulin Committee, University of Toronto, under whose control it is manufactured and supplied. It is available in 10-cc. vials. When this preparation is brought into uniform suspension, each cc. contains 40 units of Insulin together with protamine and approximately 0.08 mg. of zinc.

E·R·SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

BOOK REVIEWS

Synopsis of Gynecology. By Harry Sturgeon Crossen, M. D., F. A. C. S., Professor Emeritus of Clinical Gynecology, Washington University School of Medicine; Gynecologist to the Barnes Hospital, Saint Louis Maternity Hospital and Saint Luke's Hospital, Saint Louis, etc., and Robert James Crossen, M. D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine, Saint Louis, etc. Second edition. Illustrated. Pp. 247. Price $3.00. Saint Louis: C. V. Mosby Company, 1937.

This synopsis, as stated, is based upon the authors' book and is for the student or general practitioner who is too busy to read and study the original text. It is most concise and readily digestible. It not only outlines the correct way to make an examination, but also tells of the common errors and their prevention. Many illustrations are presented showing the right and wrong manner of conducting an examination. The work certainly fills a much needed place in the library of every general practitioner and student.

Synopsis of Digestive Diseases. By John L. Kantor, M. D. Associate in Medicine, Columbia University; Gastroenterologist and Associate Roentgenologist, Montefiore Hospital for Chronic Diseases, New York. Pp. 302. Price $3.50. Saint Louis: C. V. Mosby Company, 1937.

This volume summarizes the various conditions of the gastrointestinal tract, and is a successful presentation of the essential facts in this field. The organic diseases properly receive more attention than do the functional disorders. The charts are especially worthy of commendation.

Clinical Allergy: By Louis Tuft, M. D., Chief of Clinic of Allergy and Applied Immunology, Temple University Hospital; Associate in Immunology, Temple University School of Medicine; Director of Laboratories, Pennsylvania Department of Health, Philadelphia. Introduction by John A. Kolmer, M. D., Dr. P. H., D. Sc., LL. D., L. H. D., Professor of Medicine, Temple University; Director of Research Institute of Cutaneous Medicine, Philadelphia. 711 pages with 82 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth $8.00 net.

This book is a rather complete summary of the progress which has been made in clinical allergy to date. Any practitioner who is really interested in the subject, Medicine, be he surgeon or internist, will increase his knowledge in a worth-while degree by careful study of the text. Mention is made of experimental work in order to give the reader a better understanding of the fundamentals, but only that which has stood the test of clinical experience is given as fact. The book is essentially practical.

The author gives allergy its reasonable and important place in practice, yet properly subjects it to general medicine. He shows what may or may not be allergy and gives practical methods of differentiation. The book is replete with suggestions and prescriptions which the medical man will find useful.

The chapters on Bacterial Allergy and Allergy of the Skin are particularly good, and help to clear away some of the confusion which these conditions have caused.

The index is a mine of specific and useful information. Very useful is a detailed list of common allergens with their commercial uses, showing possible contacts the practitioner would usually overlook.

One might wish the author had devoted more space to allergy in children and to gastro-intestinal allergy. The space allowed is well used.

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A NEW METHOD FOR THE ADMINISTRATION OF WHOLE BLOOD TRANSFUSIONS*

ALBERT M. ELTON, M. D., F. A. C. S.
Newport

A brief attempt shall be made to answer two questions which arise in surgical practice concerning the subject of blood replacement. First, indications for its use; and second, methods of administration, with special reference to a new method devised and recently published by Dr. F. F. Rudder and used extensively in the negro division of Grady Hospital and Newport Sanitarium in a series of more than 1500 whole blood transfusions.

The indications for transfusion are so well known and so wide in scope that they shall be mentioned only in passing, with some emphasis being placed on the newer conceptions of the value of transfusions in the treatment of the septic state. The obvious indications are: (1) to replace blood volume in the various acute post-hemorrhage anemias and in shock; (2) to supplement a deficiency of red blood cells in the acute and chronic anemias; and (3) to stimulate blood formation in the various blood dyscrasias, as in leukemia and aplastic anemia.

It has become evident, however, that these uses of blood replacement are not the sole benefits derived from transfusion. It is known that septic patients are benefited by the administration of multiple small transfusions. It is thought that small repeated introductions of blood stimulate the opsonic activity and antibody formation in the blood of the recipient. Transfusion from immune donors has been advocated in infectious diseases, especially in the septicemic states. An immune donor may be either—one immunized by a vaccine prepared from the organism isolated from the recipient, or one who has had a similar infection with recovery.

Furthermore, transfusions are sometimes used as a diagnostic procedure. For example, in hemolytic jaundice and idiopathic thrombocytopenic purpura, if a transfusion brings about a remission of the disease, it is confirmatory evidence that the diagnosis is correct and surgical intervention (splenectomy) becomes a safe therapeutic procedure.

Let us consider the cardinal requisites of an ideal transfer of blood from donor to recipient. The first is simplicity of technique, and the second, the transference of blood without change with a minimum of outside contact and foreign factors.

The familiar citrate method of transfusion fulfils adequately the requirement of simplicity and serves a definite purpose in selected cases. With the addition of sodium citrate to the donor's blood, it may be given to the patient at any time within a few hours, thus allowing transportation to a relatively distant point. The required apparatus is simple, inexpensive, and may be assembled from meager hospital equipment. There are, however, certain disadvantages in the citrate method which may be summarized briefly as follows: First, it is claimed that the chilling, the agitation, and the exposure of the donor's blood to air lead to an increased number of post-transfusion reactions and to a greater chance for contamination; second, it is thought that the addition of an anti-coagulant impairs the biologic and immunologic properties of the blood. It can be noted from microscopic examinations that citrated blood, upon standing, shows definite morphobiological alterations which may or may not impair its function. It has been found that sodium citrate "increases the fragility of the red cells, markedly reduces the opsonic index of the plasma and the phagocytic power of the leukocytes, and destroys complement and platelets." In view of the altered coagulability of citrated blood, in addition to the possibility of platelet destruction, its use is perhaps contraindicated in hemorrhagic diathesis resulting from a lowered platelet count.

* Presented with motion pictures before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 14, 1937.

In order to obviate these disadvantages of the citrate method and to take advantage of any possible beneficial results obtained through the use of non-altered, non-modified, non-diluted blood, some hundred methods have been devised. Those in most popular usage today are: (1) the multiple syringe method, which requires three people for its successful operation and in addition offers a strong chance for contamination; (2) the Unger method, which has the advantage of a closed system, but has an impractical arrangement for flushing and requires two operators, and (3) the Scannell, which, although a closed system requiring only one operator, has an entirely inadequate washing system.

The disadvantages of the preceding methods are:

1. Elaborate and expensive apparatus.
2. Use of assistants.
3. Need for removal of patient to operating room.
4. The precipitate clotting of blood in the system due to inadequate provision for flushing.

Even with the disadvantages of the direct methods, a study of statistics by Beck leads one to believe that direct transfusion is the method of choice. In a comparative survey of 17,000 transfusions, reactions occurred two and one-half times as frequently in the citrated as in the direct methods.

At the conclusion of this paper, I should like to present an apparatus for the transference of whole blood which is so simple in its operation as to require the use of no assistant or nurse, and is safe, sure, and economical. It has incorporated those factors which have eliminated most of the disadvantages of the direct method of transfusion. Having seen the instrument evolve from its infancy to its present state of improvement, and having seen its use in numerous transfusions, I believe it fulfils adequately the purpose for which it was designed.

The Rudder apparatus was developed to fill a definite need for a machine which would eliminate the weaknesses of the ninety-nine previously designed instruments, namely:

1. The leaking of air and blood.
2. Clotting due to small, angled passages.
3. Inadequate system for cleaning of syringe during transfusions.
4. Inability to keep needles in veins.
5. An apparatus needing more than one person to complete the transfer of blood from donor to recipient.

The instrument consists of a single syringe communicating through an air tight rotating disc to four straight outlets of large caliber which lead to donor, to recipient, to saline, and to waste. It is possible to wash out the apparatus or to give clean sterile saline to either donor or recipient at any time during the procedure.

The mechanical principles as utilized in the Rudder method are relatively simple, and they allow an easy, safe, and quick transfer of blood from donor to recipient without the use of assistants, with an apparatus which can be sterilized as a unit and transported into the ward or home for use.

One of its advantages has been demonstrated in the ease of administration of auto-transfusions. Only recently 500 cc. of blood from the peritoneal cavity was returned to the circulatory system in a case of ruptured ectopic pregnancy.

With the Rudder apparatus the speed of transfer depends almost entirely on the speed of delivery of blood from the donor's vein. A 650 cc. transfusion has been completed in several instances within five to six minutes. It is stated by Blain that "blood should remain out of the circulation for only a few seconds, speed has never been found to be objectionable in a transfusion, rather it is a prime requisite, and the keynote of success."

The percentage of reaction with the use of this method compares favorably with the figures quoted by Beck, and we believe that complications occur less frequently than with other direct transfusion methods.

To summarize, it seems evident that as a routine procedure the transfusion of whole blood is preferable to citrated blood, although without question the latter has a definite and undisputed place in the field of transfusions. A new procedure is presented which we believe has eliminated many of the disadvantages of both the direct and indirect methods.

I wish to express my appreciation to Dr. Carl Garver, Kendall Moore and Miss Florence Balch for the motion picture.

REPORT ON USE OF INSULIN IN THE TREATMENT OF SCHIZOPHRENIA

N. T. HOLLIS, M. D.
Little Rock

Because of the current interest in the insulin treatment of dementia praecox, and the many inquiries concerning the same, the writer will report on his trip east to learn of this treatment.

As you know, this type of mental disease is suffered by nearly 40% of our patients in mental hospitals throughout the world. Coming on early in life, and because of its chronicity, the around 10% admissions coming into our hospitals with the disease soon accumulate to the first figure, 40%.

Up to the present time, we have had little to offer therapeutically for this disease, and the advent of the insulin treatment promising remissions in a fairly large percentage of cases was certainly most welcome. The State of New York Department of Mental Hygiene thought enough of the treatment to invite Dr. Sakel of Vienna to their state to introduce and teach the treatment there. In Europe the reports of results were most encouraging. Dr. Sakel started the treatment in the Harlem Valley State Hospital with representatives of each of the other eighteen New York State hospitals in attendance. Upon completion of the course of instruction each representative started the treatment in his respective hospital. Results have been encouraging, so much so, that the Department of Mental Hygiene agreed to accept visitors from other state hospitals in order that they might learn of the treatment.

As a representative of the Arkansas State Hospital, the writer spent the month of July at the Central Islip State Hospital, at Central Islip, Long Island, where he was received most courteously by Dr. David Corcoran, the superintendent, and Drs. M. Schater and Frank O'Neal, in charge of the insulin department. Because, perhaps, the best way to give a comprehensive idea of the work, and the lack of such details in the literature, the actual technique as practiced at Central Islip will be given.

I was preceded at Central Islip as a visitor by Dr. J. K. Morrow of the Delaware State Hospital, an Arkansas man who was also at one time here in our State Hospital. I had the pleasure of his association for a few days before he returned to his institution. Upon my way back to Arkansas, he gave me a copy of his report of the details concerned in the treatment. As his report is comprehensive in every respect, I am presenting it here, with minor changes.

Information Concerning Hypogylcemic Shock Therapy

The risk involved in this treatment is considerable, but apparently can be reduced to some extent by various precautions. At Central Islip State Hospital, the principal criterion of whether a patient shall be so treated is the state of the circulatory system; near-disasters have regularly followed attempts to treat anyone with vascular or cardiac changes; the present method is to treat only cases showing an entirely intact heart and arterial system. In general, no cases are treated if any other serious physical disorder is present. Up to June 16, 1937, the date of the latest summary issued by the commissioner in New York State, there had been three deaths in the state hospital system there: one of status epilepticus, one of pulmonary edema, and one of a sudden cardiac death a day and a half after the present treatment. Because of the serious nature of the treatment, permission of relatives is secured in all cases. The form used at Central Islip is as follows:

CENTRAL ISLIP STATE HOSPITAL
Permission for Insulin Shock Treatment

Date.....

I, ..., of ....., being the..... and nearest relative of....., a patient in the Central Islip State Hospital, Central Islip, New York, do hereby give my consent to Dr. David Corcoran, Superintendent, and his hospital personnel, for the administration of Insulin Shock Treatment upon said patient.

There are dangers associated with the treatment, which in some cases may even be serious, and I hereby relieve the State, the Superintendent, and the Central Islip Hospital and its personnel of all responsibility for any unfavorable outcome in the course of, or as a result of, this treatment.

Signed .....

Witnesses: 1. .....
2. .....

Technique: The problems connected with nursing, equipment, etc., can perhaps be most easily understood by a description of the exact technique carried out in the above institution. This is as follows: At 6:30 a. m., the patients having had no food and having been disturbed as little as possible, are brought to the insulin ward and placed in bed. No food is given, a little water from time to time is allowed, but the stomach must not be overloaded. At 7 a. m.,

the insulin is given; this one dose is the only one given in one day, regardless of the reaction. U40 insulin is used altogether in this hospital, though others have found other concentrations advantageous. It is administered by the graduate nurse; a 25 gauge needle, 1½" long is used, and it is given intramuscularly in the buttocks, alternating each day. The patient is then left quiet in bed, a folded towel over the eyes, and the room is darkened. Although some noise is unavoidable, the ward is kept as quiet as possible, to facilitate the onset of drowsiness. The insulin dosage is usually started at 8 to 20 units, and the amount is increased daily by 5 to 20 units, until coma is produced. Most patients begin to show sign of shock between 8:30 and 9 a. m., and with large doses, the shock becomes steadily more deep until it is terminated. It might be mentioned here that patients are also "digitalized" before and during treatment; the physicians here state they do not believe it is necessary, but they are carrying it out only because they are duplicating Sakel's method in every detail. Incidentally, the amount given is insufficient for real digitalization: 1½ grains of the dried leaf three times a day for three days, then 1½ grains daily during treatment. If there as no complications, shock is not terminated until 12 noon. Some of the indications mentioned, among others, for immediate termination of shock before this hour, are: (1) Generalized epileptiform convulsions, but not mere localized twitchings; (2) Persistent spastic pronating movements of the rigidly extended forearms; (3) Spastic and persistent extension of one arm, flexion of the other; (4) Difficult respiration, often with drawing of the soft tissues about the larynx, if not overcome by insertion of a nasal tube. Some of these are on empirical grounds only, and follow Sakel's technique of treatment. Shock is terminated usually at noon, for it notably is dangerous for the total hypoglycemic period to exceed 6 hours. Shock is ended by feeding a sugar solution through the nasal tube, unless the patient is able to drink, or unless an intravenous is believed necessary. The nasal tubes are very long and in two parts, with a glass connector, to that they can be aspirated. They are 20 gauge tubing, and are kept iced to facilitate passage. After insertion of the tube, an attempt is made, with a 100 cc. aspirating syringe, to aspirate stomach contents with which to make a litmus paper test, because of the danger of entering the lung during coma. If no fluid is obtained about 50 cc. of air is forcibly injected through the tube; if the latter is in the stomach, a definite impulse can be felt with the palpating hand over the stomach. Cane sugar was at first used in this hospital, but as it did not cause the patients to react quickly enough, ordinary unrefined brown sugar was substituted; using this in solution, a change in the breathing occurs almost at once, and the first signs of lessening of coma are usually seen in 5 to 10 minutes. The sugar is given in a fairly dilute but not exact solution, a little over one gram for each unit of insulin, except in exceptional cases; it is weighed out and kept in individual jars ready for each patient and labeled with the patient's name. It is not the usual practice in this hospital to follow the feeding with a small amount of plain water, but it seems that this would be a wise precaution against leakage of strong sugar solution while withdrawing the tube. At Bellevue Hospital a solution of glucose is fed, but it seems that this is a needless expense. With the ordinary sugar, the solution has recently been warmed just before feeding by adding hot water to it; this seems to hasten absorption.

During the coma itself, the nurses are of course alert and watch the patient constantly for complications. In some hospitals the temperature is taken hourly and the blood pressure every two hours; this is not done at Central Islip, though the pulse is recorded every 15 minutes, and changes in rate, rhythm or quality noted. Patients were seen who went into coma with as little as 75 units or as much as 300 units, and even greater variations are said to exist; deep coma may therefore occur unexpectedly and is always to be watched for. Sakel does not consider a coma here as it is ordinarily defined; he does not consider that the patient is in real coma unless the reflexes are abolished; this state is often unattainable on any dosage. In some institutions, abolition of the reflexes is considered an indication for termination of shock; in this hospital this state is allowed to continue for not over one hour.

Patients who do not react well to tube feeding or who have any complications demanding rapid awakening are treated by intravenous glucose. The location of the patient's best veins is known in advance. A 33% solution of glucose, at first made to order by Parke, Davis Company and later made in the State Hospital system itself, is used, as it has been found that a 50% solution scleroses veins which may be urgently needed later. Two 20 cc. syringes of glucose and an assortment of needles, as well as extra ampoules of solution, are kept on the

emergency tray, ready for instant use at any time. (If not used, the filled syringes are sent to the ward after the day's treatment is over, in case of complications during the day or night. If not used by the next morning, the solution is discarded). In terminating shock by the intravenous method, occasionally 20 cc. of the solution is enough, but usually several times that amount is needed.

After the patients have had time to react from their feedings, the cloths are removed from their eyes, the shades are raised and they are allowed to put on a robe, sit up and eat lunch; one physician remains present until everyone has eaten an adequate meal. The meals are extremely generous, high in carbohydrates, and usually two different desserts are served. The meal is rarely concluded before one o'clock, and for this reason some method of handling food for these patients is necessary, as it seems impossible to fit their meal time into the usual hospital routine. After the patients have eaten lunch, they go back to their wards, have a shower and dress. At Brooklyn State Hospital, they are given only O. T. work on their wards; but at Central Islip they are allowed to go out on the grounds, though only when accompanied by a graduate nurse familiar with their treatment and with an emergency supply of sugar. Secondary shock is not uncommon, but usually occurs during the afternoon, rarely if ever at night, using this schedule; it usually yields to feeding sugar by mouth, rarely an intravenous is needed. It seems that it would be wise to have all the patients taking this treatment kept on one male and one female ward, so that the problem of having them watched adequately would be less diffused.

Individual variations in the reaction to insulin of different patients, or even of the same patient at different times are marked. Usually when satisfactory coma is produced, the dosage is held stationary unless there are indications for a change. An interesting report from Brooklyn is that workers there note that an increasing depth of coma is noted from an identical dose of insulin daily, as the glycogen reserve is depleted, up to the rest day, usually one a week, after which glycogen is stored and a less deep coma is again seen. At Central Islip, a less deep coma was seen after one, and more noticeably after two days of rest; after the second consecutive day of treatment, no further variation was noted.

Personnel: At Central Islip 24 patients were under treatment; male and female patients were cared for in adjoining dormitories, with a few single rooms for those who became noisy while going into the shock. This is the only practical arrangement; even a single day's observation will clearly indicate the necessity for the uninterrupted presence of a physician within instant reach of every patient; complications, whether ultimately serious or not, are emergencies which demand instant attention, and many a minor mishap occurs which can easily be fatal if not corrected at once. Nurses can be of much help in these matters, but only after considerable experience. Difficult respiration, aspiration, etc., need to be noted and corrected immediately, and cannot safely wait while the physician is summoned from elsewhere. At Central Islip, there are two physicians for 24 patients; one is present before the insulin is given at 7 a. m., the other arrives about 8:30; both remain then until the tube feedings are complete, and one remains until every patient has eaten an adequate lunch. One is then on call for these patients through the afternoon, and some one physician familiar with the work is on call through the night.

The nursing personnel numbers 7 for the 24 patients, though only 2 or 3 are graduates. One graduate is, of course, in charge of the department, is responsible for a regular schedule of keeping all supplies in order (most of this is done in the afternoon for the following day, except that sugar solution must be made up the same day used,) and for instructing the new employes as they come into the department. About 4 patients is apparently the greatest number for which one nurse can care at the height of shock. Bellevue Hospital, it was noted, has about the same ratio. At Brooklyn State Hospital, it is reported, with a now experienced nursing personnel, the injections are given between 7 and 7:30 a. m., and the physician is not present in the ward until 9. It is possible that 1 or 1½ hours may be a safe interval after injection for the physician to come to the ward, but he should certainly be present all the time when working with inexperienced help.

Equipment: The ward itself has already been discussed. Any location where it is possible for the available help to watch all the patients under treatment constantly is practical. The windows should be equipped with shades; there should be a minimum of noise. Arrangement for food preservation until the hour needed is necessary, as there is no way to accommodate the treatment to the usual hospital lunch hour. At Central Islip a low type of bed is used, and

restraint is used only if the patient becomes restless. At Bellevue high hospital beds are used, but they are equipped with side rails. Movements of the comatose patients are so sudden and unpredictable that high beds not so protected are unsafe. Two falls were witnessed which were altogether unexpected and would have resulted in injury, had the high beds been used. The most conservative and least objectionable restraint for usual use would be a small canvas sheet, only large enough to cover the middle portion of the body, and with three long ties on each side for fastening to the bed. The linen supply is not excessive; even though patients perspire enormously, the sheets are not changed during the shock; rubber sheets and pillow covers are of course a necessity. Bedside or other tables are a convenience, as the patients can be observed while eating lunch, and their food intake noted, before they go back to their wards. A place to write and keep the bedside records is also necessary. The other essentials are as follows:

(1) The insulin tray. This will contain whatever type or types of insulin are used (it would probably prevent error to use only one type, preferably U40), needles of 25 gauge and 1½" long, syringe of 2, 5, and 10 cc., alcohol or other antiseptic, applicators and cotton pledgets or sponges. This tray is easiest prepared the afternoon before it is used.

(2) The tube feeding equipment. This consists of the sugar solution and the various appliances needed in giving it. The sugar is usually prepared in 50% solution, then measured into individual jars are prescribed, the jars labeled with the patient's name; this must be prepared the same morning used as it ferments readily. It is diluted to a reasonable bulk, and hot water usually added just before feeding; pitchers must be available for this purpose. Feeding cups are also present for those who are able to drink the solution. Divisible nasal tubes with a glass connector are present, one for each patient; the lower portions are kept in a bowl of ice. These tubes are usually bought in one piece and cut and fitted with connectors; they are 20 gauge, fairly stiff, and should be long that the lower portion, inserted into the stomach will project several inches from the nose, and the upper portion should then be three, or preferably four feet long.

The height of the column of liquid thus obtained is a useful factor in forcing the fluid into the stomach when the patient is rigid or spastic, and prevents the fluid from being regurgitated in case of straining or coughing. A lubricant is also provided in this group of equipment, of course, and if water is to follow each feeding, some type of small containers should be present. Adequate basins and a supply of blue litmus paper are needed. There should be at least two large aspirating syringes; those used at Central Islip are of 100 cc. capacity, have a tapered tip, a rubber plunger which can be adjusted for fit, and control rings for one-hand operation.

(3) The emergency tray. Where there is a large group of patients, this equipment is usually kept in duplicate at each of the ends of the ward, to be immediately available. The front (sterile) portion of the tray should contain, under a folded towel, two 20 cc. syringes filled with 35% glucose solution, several ordinary intravenous needles, and a 2 cc. syringe with a hypodermic needle attached, containing 1 cc. of 1:100 adrenalin. The back (non-sterile) part of the tray should contain a tourniquet, alcohol and sponges, bandage, extra ampoules of 33% glucose solution, ampoules and coramine, injectable digitalis, camphor or caffeine sodium benzoate, and alpha lobelin, and ampoule files. Both this tray and the tube feeding equipment must of course always be ready before any injection of insulin is given.

(4) Various devices for opening the jaws: Spoons, tongue depressors bound together in groups of 2, 3, and 4 mouth gags. Although not generally used, there are times when an airway tube, as used in anesthesia, should be very useful. Some hospitals provide suction equipment. A stethoscope and blood pressure device should be available.

Miscellaneous Information: The general features of treatment are not gone into here, as they have been published. There are, however, many minor but practical points of considerable importance.

Among the complications or annoyances seen during treatment are as follows: (1) Cardiac symptoms. No regular heart examinations or blood pressure determinations are done at Central Islip after treatment is begun. One writer recommends an electro-cardiogram before treatment. It seems reasonable that a least a cursory daily examination of the heart and a daily blood pressure reading should be done. Ectopic systoles and dropped beats often occur during shock, but usually disappear after feeding, and are not regarded as being of any great importance. It is conceivable that they may be

due merely to loss of nourishment (glucose) in the heart muscle itself. (2) Difficult breathing, due to obstruction or laryngospasm. The difficulty is usually obstructive and spastic; the usual manipulation of the jaw as in anesthesia is noted to be quite ineffective; prying open the mouth, insertion of a bundle of tongue depressors, and change in position are more effective. Sometimes insertion of the nasal tube is of help. Termination of shock is necessary if the condition persists. (3) Epileptiform convulsions. Twitching of isolated muscle group (myoclonic twitchings) are common and not an indication for termination; but a generalized convulsion generally demands immediate administration of glucose by vein, followed by one or more days of rest. (4) Salivation: this is often very marked and annoying; it is best treated by periodically turning the head to one side and drawing the forefingers slowly forward along both cheeks to the mouth, thus expressing the saliva; this can usually be done without awaking the patient. (5) Biting the tongue or cheek. This often occurs suddenly and unexpectedly. Any patient who is rigid should be examined closely to see whether the cheek or tongue is caught between the teeth. Patient who habitually assume rigid states may have tongue depressors placed between the teeth as soon as coma occurs. Quite severe injuries otherwise may and do occur. (6) In catatonic patients who are inactive and rigid after treatment need to be watched very carefully when being fed their meals; if they should hold food in the mouth and then develop secondary shock, suffocation is possible. (7) Falling from bed. The precautions to prevent this have already been discussed. (8) Sudden collapse. Though rare, this may occur, and demands adrenalin at once, pending the use of intravenous glucose. Besides its stimulating action, adrenalin mobilizes whatever sugar is available in the body and thus increases the blood sugar. Other stimulants are used also, of course, when believed necessary. (9) Vomiting most often occurs after tube feeding. The patient should be turned on the face with the head hanging down from the bed, and the mouth and throat cleansed out at once to prevent aspiration. If all the tube feeding is vomited, intravenous glucose is usually needed.

Special instructions are routinely given to the nurses in charge of the wards to which the patients return after each treatment. The standard order sheet so used at Central Islip is as follows:

NOTICE TO ALL NURSES

In Re: Patients under Insulin Shock Treatment. Unless otherwise ordered:

1. At 4 p. m. give each patient one-half ounce to one ounce of saturated solution magnesium sulphate.
2. Send urine specimen to the laboratory each morning.
3. No breakfast on treatment days.
4. Following patient's return from insulin department, give light occupation.
5. Observe and record the amount of food taken by the patient at supper and encourage him to eat; if patient refuses to eat call to attention of the physician on call.
6. Patient is allowed to eat food or candy after treatment until he retires. If patient complains of weakness, give him sweets, or sugared milk or coffee with bread.
7. Patient is allowed to have the usual sedatives after treatment but never before treatment.
8. Patients under insulin treatment should sleep, wherever feasible, in the same dormitory. The night nurse should have assured herself that no patient is in a coma, without disturbing the patient in his sleep. If patient shows abnormal breathing, attempt should be made to arouse the patient. In case you succeed in arousing the patient, give him one-half the contents of the sugar solution kept for him, and bread and milk, then notify the telephone operator to summon the physician on call. If you do not succeed in arousing the patient, give him at once 1 cc. of adrenalin, subcutaneously or intramuscularly, notify the telephone operator to call the physician, and bring the emergency tray to the bedside.

Several excellent theoretical explanations and practical instructions for the nurses in charge of the treatment itself have also been written, but are not included here because of their length.

Efficacy of the Treatment: Opinions of the value of the treatment vary widely, even among men working with it in the same hospital. Results seen generally are much less striking than those of Sakel. At Central Islip, most patients are of long standing, many of them having been ill several years, and results are rather poor. About 40% of those having completed treatment have been paroled, however, though not all are entirely well. At Brooklyn apparently earlier cases are obtainable, and workers there report that they have paroled more than half the patients treated. At Bellevue, workers are not overenthusiastic. One of them remarks that in a publication soon to appear, a high percentage of improvement will be reported; but that in many cases this improvement was not great enough to make parole possible, and hence not of primary importance. Some of the men

there believe, as the writer is inclined to believe, that there is no specific action in the insulin; they hold that shock as such, plus the psychotherapy given in conjunction, accounts for most of the effect. Sakel also stresses the importance of judging the proper time for bringing the patient out of shock; in a catatonic patient who becomes productive and talks freely, for instance, it is sometimes terminated at once, even though shock is just beginning. (The latter is usually unsuccessful; the rigid, mute catatonic patient is usually again in his inactive state in half an hour). At Bellevue they report as elsewhere, that acute paranoid cases seem to show the best response, but the writer has seen no improvement in more chronic paranoid types, and the catatonic group generally is rather disappointing.

On June 16, 1937, a summary of results of treatment up to date was issued by the Commissioner of Mental Hygiene in New York State. The totals of his summaries for all the state institutions are as follows:

	*	Recovered 66
	* Paroled	Much Improved 49
Completed	* 137	
Treatment: 275	*	Improved 21
	*	Unimproved 1
	*	
		Recovered 5
Still in Hospital 135		Much Improved 14
		Improved 34
		Unimproved 82

Died 3

He also lists 256 patients still under treatment, 52 of whom are already much improved, 97 improved, and 107 unchanged. The mortality is apparently about 1%, but no doubt will later be somewhat lower.

Dr. Morrow has drawn the following conclusions, with which I think all workers in the insulin treatment, so far, will agree:

(1) The parole rate in this group of patients is higher than the usual parole rate for the psychosis.

(2) Permanence of the improvement is not proved; a study of all the cases treated this year, and a summary of their conditions after five years have elapsed will be necessary; temporary improvement in itself is of course economically important.

(3) Whether there may be remote consequences of treatment of a physical nature will also be known until more time has elapsed.

(4) The term "recovered," "much improved," and "improved" are objectionable and indefinite. "Remission" is preferable to "recovered." While terms are so vague, the parole rate in itself is probably as reliable an indication as any other.

(5) There may be a specific action present; but the writer is inclined to believe that nonspecific shock, with suggestibility and psychotherapy is a more plausible explanation of the results obtained. Two types of controlled studies are needed: comparison with a matched group of patients given close attention, and all the other circumstances surrounding the treatment except insulin; and comparison of patients treated in the usual way with another group well matched, would be given insulin, but with all suggestion and psychotherapy rigidly excluded.

(6) Mental improvement should be determined more closely, both by psychiatric examination after conclusion, and by standard psychometric tests before and after treatment.

The insulin treatment will be in process here at the Arkansas State Hospital by the time this report appears in print. Any doctor in the state interested in this treatment will be most welcome in this department and, if you are unable to visit us, we shall be glad to try to answer any question you might like to ask us in writing.

SULFANILAMIDE

As The Journal goes to press, additional emphasis is placed upon the warning contained in the editorial on page 116 by the official report of 36 deaths within the United States from the use of an "elixir of sulfanilamide." This preparation contains diethylene glycol and it is to this compound, and not to the sulfanilamide, that the deaths are attributed. Some drug manufacturer, eager to cash in on the publicity which has greeted our newest drug, has placed on the market an "elixir," without giving careful attention to its composition and primary safety. The Journal reiterates its warning in the unsupervised administration of this drug and suggests the additional caution of prescribing only those products as are prepared by the reputable drug houses, nearly all of whom are our advertisers.

PREVENTION AND TREATMENT OF PUERPERAL SEPSIS*

R. C. SHANLEVER, M. D.
Jonesboro

During the past few years, there has been a nationwide campaign for the promotion of better pre-natal care. Regardless of all that has been said and done, there has been but slight change in the mortality rate from puerperal sepsis. At the present time, there is no specific for the treatment of puerperal sepsis. Today, more can be accomplished by preventitive treatment, than by cure of the disease. Generally speaking, we have two types of infections: (1) Endogenous infections, and, (2) Exogenous infections. Preventitive treatment must accomplish three things:

1. Do as much as possible to remove all sources of endogenous infections.
2. Prevent the introduction of exogenous infections.
3. Maintain the patient's resistance and natural immunity to both endogenous and exogenous types of infections.

Pre-Natal Care

By proper pre-natal care, the expectant mother should approach her puerperum in good physical condition, with her resistant powers against infections at a maximum. A careful physical examination should be made to determine if patient shows any indication of (1) anemia, (2) toxemia, or (3), focal infections, such as tonsilitis, infected teeth, otitis media, sinusitis, pyelitis, cystitis, rectal fissures, fistulas, or cervical erosions. If found, all such focal infections should be removed. By means of sunshine, fresh air, exercise, good hygiene, and a nourishing diet, with sufficient minerals and vitamins, anemia and toxemia can be prevented and the patient's general resistance to infections increased. Satistics show that puerperal infections are more prevalent during late winter and early spring months, when upper respiratory infections are flourishing. The expectant mother should be protected from people with colds, respiratory infections and contagious diseases.

During the latter weeks of her pregnancy, the expectant mother should avoid tub baths, douches and intercourse, for it is known that exogenous infections have been introduced in this manner.

* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 13, 1937.

The Conduct of Labor

The conduct of labor, be it in the home or in the hospital, should be carried out under strict aseptic technique. It is needless to go into details in regard to aseptic techniques, but there are a few points I would like to bring out:

(1) Since a number of investigators have agreed that infection may be transmitted from the mouth, nose and throat of the accoucher or other attendant, it is necessary that all attendants wear masks in the delivery room.

(2) During delivery, either in the hospital or home, the gloves of the accoucher soon become contaminated. There should be a convenient basin, filled with 2% compound cresol solution to soak the gloved hands in at frequent intervals. To illustrate why I mention these two points, the Sloane Hospital of New York reported 15 cases of puerperal infection developing from an interne who had sinusitis. The Lancet reports the death of three cases of streptococcic septicemia. These cases were delivered in the homes in different sections of the town on the same day by the same physician who had a streptococcic sore throat. Cultures were obtained from the physician's throat. Identical streptococci were isolated from the blood stream of all three cases.

(3) The patient should have a cleansing enema and the bladder emptied in the first stage of labor.

(4) Internal examinations increase the possibilities of the introduction of infection. They should be as few as possible and then preferably rectal.

(5) Avoid any condition that hastens labor, such as manual dilatations of the cervix, or the administration of pituiturin, as these produce more trauma and lacerations favoring the development of infection.

(6) Rupture of the membranes should be avoided until the cervix is completely dilated, as early opening of the membranes enhances the possibilities of infection.

(7) It is impossible to apply high or midforceps without a great deal of trauma, so they should be avoided unless abso-

lutely indicated; then they should be applied immediately to prevent prolonging the labor. This should be done by skilled hands under deep anesthesia.

(8) Prolonged labor not only increases the danger of infection from exhaustion, but also from dehydration, acidosis and devitalization of compressed tissues. Prolonged labor should be avoided as much as possible, but if prolonged unavoidably, give the patient some sedative or morphine sufficient to produce sleep and rest. Also give nourishment and fluids to patient during prolonged labor as these precautions prevent lowering the patient's resistance by exhaustion.

(9) Avoid undue loss of blood by prompt removal of placenta after separation. Manual removal of placenta should not be attempted unless patient is hemorrhaging.

(10) Repair all lacerations immediately after removal of placenta as they are potential portals for entrance of infections.

(11) Ergot and pituiturin should be given to contract the uterus and expel blood and clots.

Treatment

General treatment:

1. If hospitalized, the patient should be isolated from clean cases when temperature is above 100.5 degrees F.
2. Blood cultures and complete blood count should be made.
3. The patient should be put in Fowler's position to promote drainage. Small doses of ergot or pituiturin may be given to maintain contraction of uterus.
4. Ice cap to lower abdomen.
5. Soft, nourishing diet with at least 3000 cc. of fluid daily.
6. The bowels should be kept open by daily enemas.

Specific Treatment

Anti-streptococcic serum has been tried extensively with no uniformity of results. It has been my experience that the same rule holds true with streptococcic serum as with pneumococcic serum. If the serum is not given early in the disease, little or no benefit is obtained. For this reason, I do not wait for the results of the blood culture, as this usually requires 3 to 4 days, but immediately give from 10 to 20 cc. of serum intravenously and repeat on the second day. If no improvement is evident, I do not give any more serum. If the anti-toxic properties of the serum do not give any immediate neutralization of the toxin, the serum may act as a foreign protein, giving a delayed stimulation of the reticulo-endothelial system.

Fluid Intake and Output

The average mild case should have a fluid intake of not less than 3000 cc. and urinary output should be about 1500 cc. to maintain fluid balance in the body. The more severe cases require considerably more fluid and it is often necessary to resort to the intravenous and subcutaneous administration of fluids. Glucose and normal saline are the fluids of my choice. Glucose supplies calories when the patient is unable to take sufficient food by mouth. It promotes diuresis. It dilutes the toxins in puerperal sepsis and combats acidosis. There is usually a loss of blood chlorides in the severe cases. Normal saline restores these chlorides and also restores the loss of body fluids. One or two liters of 5% glucose is given daily by venoclysis, depending upon the severity of the patient and one liter of normal saline by hyperdermoclysis or protoclysis.

Intravenous Antiseptics

Many of these preparations, such as mercurochrome, metaphen, etc., have been used extensively but there is no uniformity of results reported in literature. The latest blood stream antiseptic is sulfanilamide, a chemical dye. This, given by mouth, is absorbed by the blood stream and is supposed to have a special affinity for the destruction of streptococci. Kolebrook of England, has reported its use in 64 cases with good results, but more time will be needed to determine its true value.

Surgical Treatment

As a general rule there are only two indications for surgery in the treatment of puerperal sepsis.

1. If the patient is hemorrhaging, the uterus should be lightly curetted to remove clots and any pieces of retained placenta.
2. If the patient develops a localized pelvic abscess, this should be drained.

Blood Transfusions

In reviewing the literature for cures obtained from the use of the various serums, foreign proteins and intravenous antiseptics, one can not help but notice that these case records contain information that many of the more severe cases had one or more blood transfusions.

Transfusions:

(1) Increase the serum protein, hemoglobin and red blood cells of the patient. This increase in red cells improves the oxygen and carbon dioxide carrying capacity of the blood.

(2) Blood from a healthy donor undoubtedly contains some antitoxin or antibodies which neutralizes toxins.

(3) Transfusions have a latent effect of stimulating the reticulo-endothelial system.

In my experience, blood transfusions have been the most reliable therapeutic procedure. I have given it by direct method and by indirect method and find very little difference in the results. In the majority of these cases, there has been a drop in the temperature and a decrease in pulse rate within the following 24 hours.

Christmas Seals

are here again!

They protect your home from Tuberculosis

On October 12, 1908, at the Old State Capitol, Little Rock, the Arkansas Tuberculosis Association was organized by a committee appointed by the Arkansas Medical Society. The name of the new organization was the Arkansas Association for the Prevention and Control of Tuberculosis. Dr. Jos. T. Clegg of Siloam Springs was the president of the society who appointed on the organization committee: Dr. J. S. Shibley, Paris, chairman; Dr. W. B. Lawrence, Batesville, Dr. D. C. Walt, Little Rock; Dr. H. C. Dunavant, Osceola; Dr. M. J. Thompson, Hot Springs, secretary.

Dr. Shibley became president of the organization, Dr. Lawrence, first vice president, Dr. Dunavant, second vice president, Hon. W. H. H. Shibley, President First National Bank, Van Buren, treasurer, Dr. Thompson, secretary. This committee began immediately with a publicity campaign, and its first report to the State Medical Society in 1909 is an account of their first publicity effort. The object is stated as prevention, "and education as the means of attaining it." The report winds up with reference to the passage of the Sanatorium Bill, and states: "We must now continue a systematic propaganda of prevention against tuberculosis."

The organization has been continuous from that time and the press has been the greatest aid in getting information to the general public. From year to year its assistance has increased, and hundreds of articles dealing with tuberculosis appear in the Arkansas press annually.

The death rate from tuberculosis is now one-fourth the rate that prevailed when the National Tuberculosis Association was organized in 1904. Medical men have led the fight, and their advice and suggestions have guided the activities of the Tuberculosis Association.

At its meeting last spring, the Arkansas Medical Society, on the recommendation of the Public Relations Committee, decided to officially sponsor the Seal Sale this year, and to join the Tuberculosis Association in a state-wide tribute to the services rendered by the press, the most important lay group in the state in its service to this cause.

It is expected that each county will open the Seal Sale with a dinner Thanksgiving week in honor of the contribution of the press. The local editors and their wives will be guests, and it is hoped each county Medical Society will appoint a committee to cooperate with the Seal Sale Chairman and will select one of its members to pay the scientists' tribute to the part the press has played in the conquest of tuberculosis. It is believed that many people of the county will be glad to attend, as the press has served organizations and individuals who appreciate the public spirit of our editors.

The Arkansas Tuberculosis Association is working on a suggested dinner program to be sent to each county chairman.

This is not in any sense a publicity stunt. The press has followed the lead of organized medicine in this campaign, and their contribution to the fight against tuberculosis has probably been greater than that of any other lay group, if its space were counted at actual money value. Without its cooperation such results as have been achieved would have been impossible.

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EDITORIAL

BEWARE OF SWINDLERS

Variations of rackets whereby physicians are victimized under various schemes are reported from time to time in various state medical journals. The element of time enters largely into warnings which might be broadcast in each state; the swindler works fast and departs for other territory before sufficient warning can be made of his operations in a particular state.

We do not believe that physicians are more gullible than any other class or profession. It so happens, however, that the crook preying upon medical men is able to take advantage of the fact that the physician feels he does not have an opportunity to investigate before he spends. There is waiting a patient; all too readily the physician gives the order, parts with his money, to find days later that he was the victim of a bare-faced fraud.

The Journal feels that it should call attention to the numbers of so-called instrument salesmen who call, usually with a meager stock, soliciting orders upon which they ask a deposit. The physician too late finds that the company is non-existent. The advertising columns of The Journal carry the message of reliable, trustworthy instrument companies who have faithfully served Arkansas physicians. They merit your patronage. They will serve you honestly. There are other honest and reliable firms who do not advertise in The Journal; there are many swindles which have no desire to be mentioned in our columns. A proper spirit of reciprocity as well as caution suggests that you deal with the firms who advertise and make possible this, Your Journal.

SULFANILAMIDE

In these days when all new drugs are greeted with over-enthusiasm, it is remarkable how extreme has been the acclaim extended sulfanilamide. Startling therapeutic success has attended its employment in various conditions. These reports have naturally stimulated its further use in these and related pathological states.

Yet, it is but proper that the medical profession exercise due discretion in the indiscriminate use of this drug. In the Journal of the American Medical Association for September 25th, 1937, there appear eleven contributions on this drug, nine of which concern themselves with the report of toxic manifestations which resulted from its administration. Among these are dermatitis, anemia, optic neuritis and photo

sensitization. Previously reported dangers are possible granulocytopenia and sulfhemoglobinemia, the latter often unrecognized without special diagnostic study.

Particularly unfortunate is the undue publicity given the drug as a "gonorrhea cure." It will be the part of wisdom to carefully weigh the evidence for and against the drug in this disease before according it complete acceptance. Upon the retail druggists in this instance lies a responsibility not to "counter-prescribe."

For the present, physicians will do well to administer this drug with all caution, particularly avoiding its use in association with other drugs. Magnesium sulphate and some of the coal tar compounds are known to be definitely contra-indicated.

AMERICAN MEDICINE: EXPERT TESTIMONY OUT OF COURT*

Our first impression of this study of the economic and social side of the practice of medicine is of a complete lack of unity in the expressed opinions. Yet this is but the obvious result of an attempt to correlate the individual ideas of some 2200 physicians upon a most complex relationship. Over 5000 letters from physicians were considered by the compilers in assembling, under various headings, this cross-section of medical thought. Monumental as the effort was, these conflicting and opposing statements have been most capably edited, presenting in all possible clearness, the varying points of view. The American Foundation offers this review without comment or conclusion. It certainly deserves the careful and critical study of the entire medical profession.

Probably the most important fact to be gleaned from the study of these pages is that the opinions of the individual physicians are generally the result of careful and conscientious thought upon their part. It is encouraging to know that these men have so carefully deliberated the present-day problems of medical care. While their conclusions may differ widely, these, at least, have been made available.

The scope of this report is indicated by mention of a few of the subjects covered: (1) What is "adequate" medical care? (2) Who should pay for the medical care of the indigent sick? (3) Is there too much specialization? (4) Can the individual doctor really furnish scientific medical care alone, or are organized laboratory and consultative assistance an absolute necessity? (5) Is the "family doctor" passing? (6) Is there too much surgery? (7) In the medicine of the future will the practitioner function as an individual or as a member of a group? (8) How far is the government responsible for the health of the individual?, and (9) Is cost the only reason why "adequate" medical care is not generally available? and many others.

The report roughly falls into two divisions. The first seven sections describe present trends in medical practice and in medical education. The last four sections discuss various proposals—social and economic as well as medical—for "distributing" medical care and lowering its cost, and for organizing medical care and public health services. Thus, in the first (and larger) part, the doctors discuss medicine itself, the greater space and emphasis given medicine being not without significance.

The work cannot be done full measure of justice in one editorial. The Journal will endeavor in future issues to comment upon such features of the report as impress us. We urge our readers to secure these volumes for their own leisurely and thoughtful study.

*American Medicine: Expert Testimony Out of Court. Pp. 1500. Price $3.50. New York: The American Foundation, 565 Fifth Avenue, 1937.

EDITORIAL COMMENT

CHRISTMAS SEAL SALE

By action of the House of Delegates at the 1937 session the Arkansas Medical Society will sponsor the Christmas Seal sale. In this connection it is urged that county medical societies take an active part in the sale of seals within their communities and it is to be further hoped that arrangements will be made in each locality to make suitable recognition of the value of the local press in previous seal sales as well as in the campaign against tuberculosis. This tribute to the press is to be state-wide and under the joint auspices of the medical societies and the tuberculosis association. A special article on the seal sale appears elsewhere in this issue.

COMING MEDICAL MEETINGS.

State President's Dinner, Pulaski County Medical Society, Little Rock, November 8th.

Oklahoma City Clinical Society, Oklahoma City, November 1-4, 1937.

Southern Medical Association, New Orleans, November 30-December 3, 1937.

Arkansas Medical Society, Texarkana, April 18-20, 1938.

American Medical Association, San Francisco, June 13-17, 1938.

RANDOM THOUGHTS OF THE SECRETARY

September 17th. On this day we ascertain that Louise Henry is totally unfamiliar with the bargaining tendencies of old world people.

September 18th. Alighting from the train at Pueblo, we promptly trail across southern Colorado, the first sight of note being the unique Raton Pass with the city nestling below on a plain. Many a mile across northern New Mexico, viewing the Palisades in beautiful Cimarron Canyon only by much neck straining and with considerable hazard to our record as a safe driver. With darkness comes Taos, the proper pronunciation of which we acquire, as well as its Indian meaning, "Beautiful valley," on this latter quite willing to differ, having laid eyes upon a valley far more deserving of the name. But for local color and tourist interest, there can be no gainsaying the village's claim. Dining in the midst of bizarre personages, artistic and inartistic, our meager knowledge of the Castillian tongue not permitting informative eavesdropping. Stopping for the night at the Inn operated by a physician's widow and assured of a hearty welcome as one of the profession.

September 19th. Visiting Taos pueblo, but slightly affected by tourist invasion and commercialism, the oldest inhabited Indian pueblo and America's first apartment house. Life runs the tenor of its way throughout the centuries, a modern thresher and the operating room light in the hospital offering lip service to the inroads of so-called civilization. Then down the Rio Grande to old Santa Fe, rightly called the "most interesting fifty mile square in America." The second oldest city in these United States, a capital city for over three hundred years, there has been but slight shift to a more modern tempo with all the years; the Indian and the Mexican still softly tread the age-old Plaza; the venerable cathedral and governor's palace look down upon scenes as they have for more than two hundred years; even the voluble, excitable Spanish seems soft and languid. First impressions of a harsh architectural note are found to be hastily drawn; these adobe walls are simple in line, true and pleasing in form, especially where there is no latter-day style influence with its disturbing clash to the pattern. In the afternoon to the Puye ruins; we are beginning to speak these Indian terms with some familiarity, although Pegg disdainfully calls attention to our attempted eunnciation of "Pojauque," this not without justification.

September 20th. Of this day we care to have no recollections; the Pecos ruins which detoured us many a mile might well have been left unexcavated in our humble opinion, while the 58-mile stretch from Las Vegas to Santa Rosa awakens a true kinship with the wagon train travels of the 49ers. Amarillo offers acceptable hospitality and to this city we extend the palm as a satisfying trail end.

September 21st. Monotonously driving the plains of the Panhandle, arriving Oklahoma City in mid-afternoon, the tour losing some of its interest and the morrow eagerly awaited.

September 22nd. Delivering the family with accompanying baggage on the home threshold, the youngster delighting in familiar surroundings after a four month absence.

September 24th. Listening to Tommy Foltz's tale of the patient who, stricken with diarrhea, steps out for the friendly counsel of the druggist, is struck by a truck, suffering a compression fracture of the spine, a condition for which counter-prescribing is notoriously inadequate. And thereby hangs a moral of some sort.

October 2nd. While we are not given to patting ourself on the back, at least, only rarely, we do feel that we deserve special commendation for remaining at our post of duty this day as practically all of our professional colleagues, to say nothing of hundreds of lay associates, hie forth for Fayetteville to see the Razorback-Frog gridiron battle.

October 6th. In the space of twelve hours we journey to Brinkley, spend several pleasant hours with the members of the third district and enjoy the bountiful hospitality of the Monroe County Medical Society, have confirmation of the musical genius of C. H. McKnight's family, and in intensive solitude make the return journey. Finding that in our absence we had been reported as an automobile casualty, in degree ranging from no injury to fatality, causing us to ponder just how great a majority the "I told you sos" had over the "That's too bad."

October 10th. With no regard to the chronological phase of the situation, we engage in the celebration of Peggy's birthday.

October 11th. Again in solitude we strike out for Batesville sojourning for sufficient time in Searcy to persuade Hawkins to accompany us. In familiar surroundings of the country club we greet a large audience, among them the Auxiliary president, whose travels have not previously coincided with ours; Past-President McCaskill and the better half, who, no doubt goes along as navigator; and Walter Carruthers, a new face at medical meetings. Through a thin partition, Jeffery is heard conversing with a patient, to propound that oft-put, never-satisfactorily-answered question, "How does it happen that you did not get worse until sundown?" From Matthews we glean a number of items concerning maneuvers at Fort Riley this summer, the most astounding one being an admission of industry on the part of Gates, losing its value in the knowledge that he went A. W. O. L. after all. Moving us to admiration is the accomplishment of President Johnston in successfully, and without a stumble, introducing all at the dinner table. Al Buchanan presents a variety of unique cases, each of which tried but did not stump his ingenuity, surprisingly developed in a room whose second function is the perusal of the morning paper. And so away, bidding Hawkins good-bye at twelve in Searcy and stopping at one-thirty in Conway's hotel for a much-wanted slumber.

October 12th. A bit late on the scene, we enter into the activities of the meeting honoring those wonderful men who have practiced medicine with highest ethics in northwest Arkansas for fifty years or more. A long time to listen to the woes of humanity, but one easily reads in their countenances the knowledge of a life well spent in most satisfying service and a serenity that later-day practitioners are denied. The young men are glad to shake their hands and proud to know them. A well-rounded program, attentively heard by a large crowd is Goldstein's reward for much labor. In the evening, a short party at the Goldstein's, and thence to the Hoges' for a dinner which we shall long remember for sheer beauty of surroundings, the pleasures of happy conversation and epicurean food. And to bed realizing that on the morrow we return to humdrum pursuits.

MEMBERSHIP ROSTER OF THE ARKANSAS MEDICAL SOCIETY—1937

The Roster of the Arkansas Medical Society has been placed in the center of this issue to permit its ready removal for filing.

ARKANSAS COUNTY†

Davis, G. C.	Gillett
Dickens, Homer	DeWitt
Drennen, S. A.	Stuttgart
Fowler, Arthur	Humphrey
John, M. C., Sr	Stuttgart
John, M. C., Jr.	Stuttgart
Lumsden, C. A.	DeWitt
Rasco, C. W., Sr.	DeWitt
Rasco, C. W., Jr.	DeWitt
Swindler, E. B.	Stuttgart
Whitehead, R. H.	DeWitt
Word, J. T.	St. Charles

ASHLEY COUNTY†

Barnes, L. C.	Hamburg
Cockerham, H. E.	Portland
Cone, A. E.	Portland
Crandall, M. C.	Wilmot
Fletcher, G. W.	Montrose
Garrett, W. R.	Hamburg
*Gibbs, A. M.	Hamburg
Hawkins, M. C.	Parkdale
Mask, D. L.	Hamburg
Riggins, W. C.	Hamburg
Smith, M. L.	Crossett
Spivey, C. E.	Crossett
Webb, R. M.	Crossett
White, E. O.	Hamburg
Wood, J. T.	Crossett

BENTON COUNTY

Atkinson, R. M., Jr	Bentonville
Buffington, G. H.	Decatur
Chastain, M. W.	Bentonville
*Clemmer, J. L.	Gentry
Curry, W. J.	Rogers
Duckworth, F. M.	Siloam Springs
Estes, Neal D.	Rogers
Eubanks, F. G.	Decatur
Harrison, A. J.	Springdale
Highfill, E. J.	Cave Springs
Hodges, G. E.	Rogers
*Horton, C. W.	Hiwasse
Hughes, G. A.	Siloam Springs
Hurley, C. E.	Bentonville
Koobs, H. J. G.	Rogers
Love, G. M.	Rogers
McNeil, C. L.	Rogers
Moore, W. A.	Rogers
Peacock, A. L.	Gentry
Pickens, E. A.	Bentonville
Pickens, W. A.	Bentonville
Powell, J. T.	Gravette
Scott, L. L.	Siloam Springs
Williams, J. R.	Siloam Springs
Wilson, C. S.	Siloam Springs

BOONE COUNTY†

Blackwood, J. C.	Western Grove
*Evans, D. E.	Harrison
Fowler, J. H.	Harrison
Fowler, Ross	Harrison
Fowler, T. P.	Harrison
Gladden, J. G.	Harrison
Gray, E. M.	Mountain Home
Jackson, Lloyd	Harrison
Jackson, Ulys	Harrison
Johnson, J. J.	Harrison
Kirby, H. V.	Harrison
McCoy, O. B.	Harrison
Mooney, M. L.	Mountain Home
Moore, W. T.	Everton
Morrow, J. J.	Cotter
Owens, D. L.	Harrison
Poynor, W. H.	Harrison
Sexton, J. W.	Mt. Judea
Thompson, J. I.	Yellville
Watkins, W. L.	Alpena Pass
Weast, L. M.	Yellville

BRADLEY COUNTY†

Crow, M. B.	Warren
Crow, M. T.	Warren
Ellison, L. E.	Warren
Frederick, R. H.	Corinth, Miss.
Gannaway, C. E.	Warren
Hunt, W. J.	Warren
Martin, Chas.	Warren
Martin, Rufus	Warren
Reasons, W. B.	Hermitage
Roark, W. N.	Hermitage
Snodgrass, W. A., Jr.	Warren

CARROLL COUNTY†

Bohannan, J. H.	Berryville
Butt, W. A.	Green Forest
Carter, A. L.	Berryville
John, J. F.	Eureka Springs
McCurry, D. K.	Green Forest
Pace, Henry	Eureka Springs
*Parker, J. R.	Berryville
Slusser, C. W.	Green Forest
Webb, J. H.	Eureka Springs

CHICOT COUNTY†

Baker, E.	Dermott
Barlow, E. E.	Dermott
Burge, J. H.	Lake Village
Clark, B. C.	Lake Village
Craig, W. A.	Eudora
Douglas, S. W.	Eudora
Easterling, W. D.	Lake Village
Easterling, W. W.	Lake Village
Hutson, W. J.	Eudora
McGehee, E. P.	Lake Village
Schwarz, W. J.	Lake Village
Thompson, J. A.	Dermott

CLARK COUNTY†

Bremer, J. P.	Point Cedar
Bryant, R. L.	Arkadelhpia
Carter, E. E.	Arkadelphia
Dickerson, D. A.	Gurdon
Doane, S. N.	Arkadelphia
Grace, J. K.	Arkadelphia
Reid, J. W.	Arkadelphia
Ross, H. A.	Arkadelphia
Ross, T. T.	Little Rock
Steed, C. J.	Gurdon
Townsend, C. K.	Arkadelphia

CLAY COUNTY

Blackwood, W. J.	Rector
Clopton, O. H.	Rector
Futrell, J. B.	Rector
Hiller, J. P.	Pollard
Jones, F. H.	Piggott
Latimer, N. J.	Corning
McGuire, J. E.	Piggott
Richardson, M. C.	Corning

CLEBURNE COUNTY†

Birdsong, T. C.	Shiloh
Hall, H. J.	Higden
Matthews, J. T.	Heber Springs

CLEVELAND COUNTY†

Adams, T. L.	Rison
Dunman, B. E.	New Edinburg
Hamilton, A. J.	Rison
Hancock, W. G.	Rison
Harris, Sidney	Herbine
Robertson, A. B.	Rison
Ruth, Junius	Rison

COLUMBIA COUNTY†

Baker, J. J.	Magnolia
Carrington, H. K.	Magnolia
Cooksey, W. P.	Magnolia
Horn, W. H.	Taylor
Jones, T. H.	Waldo
Jordan, T. S.	Magnolia
Kitchens, H. M.	Waldo
McLeod, G. F.	Magnolia
McWilliams, Chas. T.	Magnolia
Mullins, G. E.	Emerson
Rushton, J. F.	Magnolia
Smith, P. M.	Magnolia
Souter, A. J.	Waldo
Walker, J. C.	Emerson

CONWAY COUNTY†

Close, Edgar	Jerusalem
Etheridge, C. E.	Morrilton
Goatcher, A. L.	Plummerville
Halbrook, J. F.	Plummerville
Hardison, T. W.	Morrilton
Holloway, W. R.	Center Ridge
Jones, R. A.	Perry
Matthews, E. W.	Morrilton
Matthews, J. M.	Morrilton
Mobley, H. E.	Morrilton
Scarlett, W. P.	Morrilton
Smith, John M.	Morrilton
Smith, W. Meyers	Little Rock

CRAIGHEAD-POINSETT†

Alcott, G. B.	Weiner
Altman, J. T.	Jonesboro
Atkinson, O. L.	Hickory Ridge
Baird, J. L.	Marked Tree
Barrett, E. R.	Jonesboro
Barrett, R. M.	Black Oak
Bates, C. A.	Lake City
Berry, W. E.	Trumann
Burge, H. G.	Nettleton
Campbell, G. O.	Trumann
Cohen, O. T.	Jonesboro
Elders, J. B.	Paragould
Elders, J. W.	Harrisburg
Ellis, Ira W.	Monette
Haltom, W. C.	Jonesboro
Harrison, B. L.	Trumann
Horner, E. J.	Jonesboro
Jernigan, R. M.	Jonesboro
Jones, J. H.	Lepanto
Jones, J. K.	Lepanto
Lutterloh, P. W.	Jonesboro
McAdams, H. H.	Jonesboro
McCurry, J. H.	Cash
McDaniel, L. H.	Tyronza
Moreland, W. H.	Tyronza
Nisbett, Frank	Brookland
Overstreet, W. C.	Jonesboro
Pierce, J. O.	Marked Tree
Ramsey, J. W.	Jonesboro
Ratliff, R. W.	Jonesboro
Reagan, C. H.	Marked Tree
Shanlever, R. C.	Jonesboro
Sloan, R. M.	Jonesboro
Smith, O. V.	Bay (P. O. Trumann)
Smith, W. H.	Bono
Stroud, E. J.	Jonesboro
Stroud, H. A.	Jonesboro
Thorn, W. T.	Monette
Tullos, A. M.	Trumann
Verser, W. W.	Harrisburg
Willett, R. H.	Jonesboro

CRAWFORD COUNTY†

Bennett, B. L.	Van Buren
Bruce, B. B.	Alma
Campbell, C. J.	Mulberry
Crigler, J. R.	Alma
Dibrell, M. S.	Van Buren
Engler, F. G.	Mountainburg
Galloway, O. R.	Alma
Kirkland, S. D.	Van Buren
Kirksey, O. J.	Mulberry
McKelvey, A. A.	Van Buren
Savery, H. W.	Van Buren
Stewart, J. M.	Van Buren
Trice, J. B.	Van Buren
Young, L. G.	Van Buren
*Wigley, J. A.	Mulberry

CRITTENDEN COUNTY†

Barksdale, Oscar	West Memphis
Hare, T. S.	Crawfordsville
Irby, J. T.	Earl
McVay, L. C.	Marion
Parker, A. C.	Clarkedale
Purnell, R. L.	Marion
Ray, R. H.	Earl
Stevenson, B. M.	West Memphis
Watson, H. S.	Earl

CROSS COUNTY

Barr, A. F.	Cherry Valley
Griffin, J. L.	Vanndale
Griffin, W. L.	Cherry Valley
Longest, Ruffin	Wynne
Miller, J. S.	Parkin
Peterson, T. A.	Wynne
Smith, R. S.	Parkin
Stewart, T. J.	Wynne
Wilson, Thomas	Wynne

DALLAS COUNTY†

Cheatham, H. A.	Princeton
Ellis, W. S.	Fordyce
Estes, E. E.	Fordyce
Estes, S. J.	Fordyce
Lisenbee, A. M.	Sparkman
Taylor, J. E. M.	Sparkman
Ward, W. P.	Fordyce

* Deceased

† Membership equals or exceeds that of 1936.

DESHA COUNTY†

Biscoe, Gibbs	Dumas
Chennault, J. C.	McGehee
Hellums, J. H.	Dumas
Kimbro, C. H.	Tillar
Leverett, Marion	McGehee
MacCammon, Vernon	Arkansas City
Rands, H. A.	Dumas
Smith, H. T.	McGehee
White, Robt. F.	McGehee

DREW COUNTY†

Binns, Van C.	Monticello
Chambers, S. W.	Monticello
Collins, A. S. J.	Monticello
Dickins, R. D.	Monticello
Gates, S. M.	Monticello
Pope, M. Y.	Monticello
Price, J. P.	Monticello
Wilson, J. S.	Monticello

FAULKNER COUNTY†

Brittain, W. L.	Conway
Brooke, H. C.	Conway
Dawson, R. L.	Wooster
Dickerson, C. H.	Conway
Downs, J. H.	Vilonia
Dunaway, L. S.	Conway
Fraser, N. E.	Conway
Hardy, H. B.	Greenbrier
Harrod, George	Conway
Hassell, L. L.	Hebron, Nebraska
Henderson, G. L.	Conway
Kitley, J. R.	Mayflower
Lieblong, J. S.	Greenbrier
Mabry, Tom	Vilonia
McCollum, I. N.	Conway
McDonald, W. T.	Vilonia
Smith, T. M.	Conway
Taylor, R. L.	Conway
Westerfield, J. S.	Conway

FRANKLIN COUNTY†

Akin, W. F.	Branch
Bollinger, W. H.	Charleston
Douglass, Thos.	Ozark
Gibbons, W. H.	Ozark
Porter, W. C.	Ozark
Post, J. L.	Altus

GARLAND COUNTY†

Adams, Frank M.	Hot Springs
Biggs, O. E.	Hot Springs
Black, T. N.	Hot Springs
Blackshare, W. M.	Hot Springs
Bollmeier, L. N.	Chicago, Ill.
Bowman, M. B.	Hot Springs
Boydstone, J. O.	Hot Springs
Brewer, Howell	Hot Springs
Browne, P. Z.	Hot Springs
Burch, N. B.	Hot Springs
Casada, B. F.	Hot Springs
Chamberlain, W. W.	Hot Springs
Chesnutt, J. H.	Hot Springs
Clardy, Floyd	Hot Springs
Coffey, G. C.	Hot Springs
Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Davis, Carl G.	Hot Springs
Diederich, V. P.	Hot Springs
Ellis, Jack R.	Hot Springs
Ellis, L. R.	Hot Springs
Fletcher, Geo. B.	Hot Springs
Garratt, C. E.	Hot Springs
Gray, W. E.	Hot Springs
Hebert, G. A.	Hot Springs
Jarrell, Foster	Hot Springs
King, L. E.	Hot Springs
King, O. H.	Hot Springs
Klugh, W. G.	Hot Springs
Lautman, M. F.	Hot Springs
Laws, W. V.	Hot Springs
Lee, D. C.	Hot Springs
Lutterloh, C. H.	Hot Springs
MacLaughlin, O. J.	Hot Springs
Martin, L. G.	Hot Springs
Merrit, J. F.	Hot Springs
Moss, C. S.	Hot Springs
Nims, C. H.	Hot Springs
Pate, C. N.	Hot Springs
Porter, W. F.	Hot Springs
Power, Allyn	Hot Springs
Preston, H. H.	Hot Springs
Proctor, J. M.	Hot Springs
Purdum, E. A.	Hot Springs
Reed, L. E.	Hot Springs
Rowland, J. F.	Hot Springs
Sanders, T. E.	Hot Springs
Scott, Jett	Hot Springs
Scully, F. J.	Hot Springs
Shaw, Ernest	Hot Springs
*Shaw, J. B.	Hot Springs
Short, Z. N.	Hot Springs
Smith, Euclid	Hot Springs
Smith, O. A.	Hot Springs
Smith, W. K.	Hot Springs
Stell, J. S.	Hot Springs
Stough, D. B.	Hot Springs
Strachan, J. B.	Hot Springs
Sullivan, A. G.	Hot Springs
Tarleton, F. S.	Hot Springs
Taylor, L. T.	Mt. Pine
Tribble, A. H.	Hot Springs
Wade, H. K.	Hot Springs
Wilkins, J. S.	Hot Springs
Williams, J. W.	Hot Springs
Wootton, W. T.	Hot Springs
Wright, H. K.	Hot Springs

GRANT COUNTY†

Cole, C. F.	Prattsville
Cox, J. E.	Leola
Hope, O. W.	Sheridan
Kelly, Miles F.	Sheridan
Kelly, O. R.	Sheridan
Paxton, R. L.	Sheridan

GREENE COUNTY

Blackwood, J. D.	Jonesboro
Bridges, G. P.	Paragould
Cupp, R. W.	Marmaduke
Dillman, J. A.	Paragould
Ellington, W. E.	Paragould
Haley, R. J.	Paragould
Hardesty, C. A.	Paragould
Hudgins, J. J.	Paragould
Hutcherson, R. L.	Delaplaine
Lamb, J. H.	Paragould
Majors, W. M.	Paragould
Self, G. S.	Paragould

HEMPSTEAD COUNTY†

Allison, W. G.	Hope
Autrey, J. R.	Columbus
Branch, J. W.	Hope
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
Darnall, H. H.	Columbus
Gentry, J. E.	McCaskill
Lile, L. M.	Hope
Martindale, J. G.	Hope
McDonald, T. L.	Hope
McKenzie, J. M.	Hope
Robins, R. R.	Camden
Robins, W. F.	Ozan
Smith, Don	Hope
Weaver, J. H.	Hope

HOT SPRING COUNTY†

Barrier, W. F.	Malvern
Bramlitt, E. T.	Malvern
Brown, H. L.	Malvern
Hodges, W. G.	Malvern
McCray, E. H.	Malvern
Norton, J. M.	Donaldson
Prickett, M. D.	Malvern
Sizemore, Paul	DeQueen
*Williams, J. M.	Malvern

HOWARD-PIKE COUNTY†

Alford, T. F.	Murfreesboro
Burleson, J. J.	Antoine
Dildy, E. V.	Nashville
Duncan, M. D.	Murfreesboro
Gibson, W. M.	Nashville
Gould, W. B.	Glenwood
Holcombe, J. T.	Mineral Springs
Holt, H. H.	Nashville
Hopkins, J. S.	Nashville
Roberts, J. L.	Nashville
Simpson, W. B.	Nashville
Smythe, C. H.	Glenwood
*Stebbins, N. I.	Nashville
Wood, R. L.	Delight

INDEPENDENCE COUNTY

Bone, O. L.	Newark
Churchill, C. A.	Batesville
Copp, Noel	Calico Rock
Craig, M. S.	Batesville
Estes, W. H.	Sage
Evans, L. T.	Batesville
Gray, C. C.	Batesville
Gray, F. A.	Batesville
Hinkle, C. G.	Batesville
*Hooper, J. M.	Batesville
Huskey, I. M.	Cave City
Jeffery, Paul	Bethesda
Johnston, O. J. T.	Batesville
Jones, S. S.	Calico Rock
McAdams, V. D.	Cord
Monfort, J. J.	Batesville
Robertson, S. N.	Sulphur Rock
Roe, C. E.	Viola
Smith, J. D.	Melbourne
Smith, R. L.	Melbourne
Weathers, J. L.	Salem
Wilson, W. H.	Oxford
Woods, O. S.	Salem

JACKSON COUNTY†

Best, A. L.	Newport
Causey, G. A.	Swifton
Elton, A. M.	Newport
Erwin, I. H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Ivy, J. B.	Tuckerman
Jamison, O. A.	Tuckerman
Kimberlin, K. K.	Tuckerman
Norris, R. O.	Tuckerman
Owens, M. B.	Newport
Pierce, W. N.	Tupelo
Stephens, G. K.	Newport
Walker, H. O.	Newport
Watson, E. L.	Newport

JEFFERSON COUNTY

Beard, J. C.	Pine Bluff
Blackwell, O. G.	Pine Bluff
Bruce, W. H.	Pine Bluff
Capel, C. B.	Pine Bluff
Capel, H. T.	Pine Bluff
Caruthers, C. K.	Pine Bluff
Causey, H. A.	Pine Bluff
*Chavis, W. M.	Pine Bluff
Clark, O. W.	Pine Bluff
Cunningham, T. J.	Pine Bluff
Hankison, O. C.	Pine Bluff
Hughes, A. A.	Pine Bluff
Jenkins, J. S.	Pine Bluff
John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
Lowe, W. T.	Pine Bluff
Luck, B. D., Jr.	Pine Bluff
Luck, B. D., Sr.	Pine Bluff
Maynard, R. E.	Pine Bluff
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
Payne, Virgil	Pine Bluff
Pittman, W. G.	Pine Bluff
Scales, J. W.	Pine Bluff
Shelton, M. A.	Wabbaseka
Simmons, W. H.	Pine Bluff
Spillyards, J. S.	Pine Bluff
Troupe, A. W.	Pine Bluff
Woods, R. P.	Altheimer

JOHNSON COUNTY

Burgess, M. E.	Sacetone, Arizona
Hardgrave, G. L.	Clarksville
Hunt, E. H.	Clarksville
*Hunt, W. R.	Clarksville
Johnston, Robt. H.	Clarksville
Kolb, Jas. M.	Clarksville
Kolb, J. S.	Clarksville
*Mooney, J. D.	Clarksville
Pierce, S. C.	Hartman
Pillstrom, E. W.	Coal Hill
Siegel, G. R.	Clarksville

LAFAYETTE COUNTY†

Baker, F. E.	Stamps
Keith, A. W.	Stamps
McKnight, J. F.	Bradley
Youmans, F. W.	Lewisville

LAWRENCE COUNTY

Ball, C. C.	Ravenden
Blaine, Mitchell	Mammoth Spring
Brown, W. W.	Hardy
Cruse, E. J.	Black Rock
Felts, J. W.	Alicia
*Gibson, E. L.	Alicia
Guthrie, T. C.	Smithville
Hardaway, J. E.	Lynn
Hatcher, W. W.	Imboden
Henderson, A. G.	Imboden
Hughes, J. C.	Hoxie
Hukill, O. K.	Hot Springs
Hull, H. B.	Mammoth Spring
Hundley, L. K.	Hardy
Johnson, T. Z.	Walnut Ridge
Johnston, Wm.	Hardy
Kendall, W. S.	Strawberry
*McCarroll, H. R.	Walnut Ridge
Merrell, J. L.	Walnut Ridge
Poindexter, J. C.	Imboden
Tibbels, Chas. D.	Black Rock
Tibbels, Wm. O.	Evening Shade
Watkins, G. M.	Walnut Ridge

LEE COUNTY†

Bean, W. B.	Marianna
Bogart, H. D.	Marianna
Chaffin, C. W.	Moro
Crawford, W. S.	Marianna
Hodge, N. C.	Marianna
White, H. L.	Rondo
Williamson, O. L.	Marianna

LINCOLN COUNTY†

Dixon, C. W.	Gould
Johnson, R. L.	Grady
Tarver, Vernon	Star City
Thiolliere, A. C.	North Little Rock
Wood, G. C.	Grady

LITTLE RIVER COUNTY

Castile, Herman	Foreman
Phillips, P. H.	Ashdown
Ringgold, J. W.	Ashdown
York, W. W.	Ashdown

LONOKE COUNTY

Beaty, S. S.	England
Benton, T. E.	Lonoke
Brewer, J. F.	Kerrs
Cailahan, E. A.	Carlisle
Corn, F. A., Jr.	Lonoke
Crowgey, W. B.	Scott
*Ellis, C. S.	Lonoke
Harris, E. H.	Coy
Utley, F. E.	Cabot
Ward, O. D.	England
Watson, Asa C.	Haskell
Wells, J. B.	Scott

MADISON COUNTY

Beeby, Chas.	Huntsville
Counts, Geo. D.	Wesley
Hill, N. J.	Hindsville
Walker, J. F.	Combs
Youngblood, Fred	Huntsville

MILLER COUNTY†

Collom, S. A., Jr.	Texarkana
*Dale, R. R.	Texarkana
Daniel, N. B.	Texarkana
Daubs, Wm. H.	Lewisville
Fuller, T. E.	Texarkana
Hibbitts, Wm.	Texarkana
Hunt, Preston	Texarkana
Kirkpatrick, R. R.	Texarkana
Kittrell, T. F.	Texarkana
Kosminsky, L. J.	Texarkana
Lanier, L. H.	Texarkana
Laws, C. S.	Texarkana
Lee, A. G.	Texarkana
Lennard, F. M.	Texarkana
Longino, H. E.	Texarkana
Mann, Albert H.	Texarkana
Middleton, B. C.	Texarkana
Murry, H. E.	Texarkana
Priest, Perry	Texarkana
Robins, R. R.	Texarkana
Smith, W. D.	Texarkana
Webster, H. R.	Texarkana
Williams, J. F.	Texarkana

MISSISSIPPI COUNTY†

Atkinson, Gean	Manila
Atkinson, George	Manila
Beasley, J. E.	Blytheville
Boyd, D. L.	Blytheville
Caldwell, C. A.	Blytheville
Campbell, J. H.	Joiner
Cantrell, M. L.	Marked Tree
Ellis, N. B.	Wilson
Grimmett, W. A.	Blytheville
Hamner, J. H.	Dyess
Harwell, C. M.	Osceola
Hosey, N. R.	Joiner
Hubener, L. L.	Blytheville
Hudson, Thos. F.,	Luxora
Husbands, F. L.	Blytheville
Hutchins, W. P.	Manilla
Johnson, I. R.	Blytheville
Johnson, R. L.	Bassett
Massey, L. D.	Osceola
Polk, J. T.	Keiser
Regnier, W. A.	Blytheville
Robinson, A. E.	Leachville
Robinson, F. A.	Blytheville
Saliba, J. A.	Blytheville
Schirmer, R. E.	Blytheville
Sheddan, W. J.	Osceola
Sims, H. C.	Blytheville
Smith, F. D.	Blytheville
Stevens, C. C.	Blytheville
Tidwell, J. L.	Dell
Tipton, P. L.	Blytheville
*Usrey, M. O.	Blytheville
Walls, J. M.	Blytheville
Washburn, A. M.	Little Rock
Webb, Floyd,	Blytheville
Wilson, C. E.	Blytheville
Wilson, J. H.	Dyess

MONROE COUNTY†

Boswell, W. L.	Clarendon
Bradley, W. T.	Blackton
Dalton, M. L.	Brinkley
Dozier, F. S.	Mena
Henry, C. A.	Clarendon
Martin, W. H.	Holly Grove
McKnight, C. H.	Brinkley
McKnight, E. D.	Brinkley
Murphey, N. E.	Clarendon
*Terry, P. E.	Holly Grove

MONTGOMERY COUNTY†

Freeman, W. D.	Mt. Ida
McLean, J. H.	Caddo Gap
Robbins, J. D.	Mount Ida
Watkins, G. E.	Boles

NEVADA COUNTY†

Buchanan, A. S.	Prescott
Dickey, A. B.	State Sanatorium
Hesterly, J. B.	Prescott
Hesterly, S. J.	Prescott
Hirst, O. G.	Prescott
Hughes, F. A.	Prescott
Hughes, R. P.	Prescott
Regnier, F. W.	Prescott
Shell, E. E.	Prescott

OUACHITA COUNTY

Byrd, E. H.	Givins, Texas
Byrd, E. J.	Bearden
Clemens, J. P.	Mt. Holly
Early, C. S.	Camden
Hollingsworth, G. F.	Hampton
Jameson, J. B.	Camden
Kennerly, R. C.	Camden
McGill, S. D.	Camden
Partee, N. G.	Camden
Plunkett, C. M.	Elliott
Powell, B. V.	Camden
Purifoy, W. A.	Chidester
Rhine, T. E.	Thornton
Rinehart, J. S.	Camden
Ritchie, C. E.	Stephens
Robins, R. B.	Camden
Rushing, J. L.	Chidester
Sanders, G. P.	Stephens
Thompson, H. F.	Bearden
Thompson, S. A.	Camden
Word, N. S.	Camden

PHILLIPS COUNTY†

Baker, J. P.	West Helena
Brown, E. T.	Marvell
Bruce, W. B.	Helena
Butts, J. W.	Helena
Connolly, W. B.	Helena
Cox, Allen E.	Helena
Cox, Aris W.	Helena
Cruise, J. J.	Helena
Ellis, James Baxter	Los Angeles Calif.
Ellis, W. A., Jr.	Helena
Fink, M.	Helena
Henry, Morriss	Helena
King, J. A.	Elaine
King, W. C.	Helena
Kultgen, Edward	Elaine
Maddox, A. H.	Elaine
Nicholls, J. W.	Helena
Orr, W. R.	Helena
Parker, Orlie	Wabash
Rightor, H. H.	Helena
Russwurm, W. C.	Helena
Storm, Geo. R.	West Helena

POLK COUNTY†

Hawkins, B. H.	Mena
Heller, H. G.	Mena
Hilton, J. G.	Mena
Lee, F. A.	Vandervoort
McElroy, F. Q.	Mena
Mullins, F. C.	Grannis
Murphey, J. H.	Opal
Redman, Pierre	Mena
*Taylor, J. M.	Mena

POPE COUNTY†

Cale, Walter	Atkins
Cowan, Riley	London
Gardner, L.	Russellville
Hood, Robert	Russellville
Ivy, J. B.	Russellville
Millard, Roy I.	Russellville
Smith, L. M.	Russellville
Smith, R. L.	Russellville
Stanford, J. M.	Russellville
Tate, A. B.	Russellville
Tetter, C. R.	Pottsville

PRAIRIE COUNTY†

Adams, Edward,	DeValls Bluff
Calley, John H.	Waldron
Crockett, W. H.	Biscoe
Gilliam, J. C.	Des Arc
Lynn, J. R.	Hazen
*Parker, Luke	DeValls Bluff
Parker, Wm.	DeValls Bluff
Porter, T. G.	Hazen
Williams, W. J. B.	Des Arc
Wilson, J. G.	Ulm

PULASKI COUNTY

Agar, John	Little Rock
Allen, Estes	Little Rock
Allen, H. R.	Little Rock
Arkabauer, C. A.	Little Rock
Atkinson, Shelby	North Little Rock
Autry, P. G.	Little Rock
Bailey, W. E.	Little Rock
Banks, Jeff	Little Rock
Barrier, L. F.	Little Rock
Bennett, B. A.	Little Rock
Blakely, R. M.	Little Rock
Bond, S. P.	Little Rock
Brooks, C. M.	Little Rock
Brown, L. R.	Galveston, Texas
Brown, T. D.	Little Rock
Burt, E. G.	Crossett
Calcote, R. J.	Little Rock
Caldwell, Robt.	Little Rock
Carruthers, F. W.	Little Rock
Cazort, A. G.	Little Rock
Cheairs, D. T.	Little Rock
Chesnutt, C. R.	Little Rock
Choate, H. L.	Little Rock
Compton, J. N.	Little Rock
Cook, R. C.	Little Rock
Coon, A. B.	Little Rock
Cosgrove, K. W.	Little Rock
Crow, E. W.	Little Rock
Cummins, Bryce	Little Rock
Cunningham, J. C.	Little Rock
Daly, M. G.	Little Rock
Darnall, R. F.	Little Rock
Davis, J. C.	Little Rock
Day, E. O.	Little Rock
DeGroat, A. F.	Little Rock
Dibrell, J. L.	Little Rock
Dibrell, J. R.	Little Rock
Dishongh, H. A.	Little Rock
Donaldson, J. K.	Little Rock
Eubanks, R. M.	Little Rock
Fletcher, Elizabeth D.	Little Rock
Fly, T. M.	Little Rock
Freemyer, W. N.	Little Rock
Fulmer, P. M.	Little Rock
Fulmer, S. C.	Little Rock
Gann, Dewell, Jr.	Little Rock
Gay, E. C.	Little Rock
Gray, A. F.	Little Rock
Gray, E. F.	Little Rock
Gray, Oscar	Little Rock
Grayson, W. B.	Little Rock
Hardeman, D. R.	Little Rock
Harris, Fred Wm.	Little Rock
Harris, R. P.	Hot Springs
Hayes, J. H.	Little Rock
Hayes, J. M.	Little Rock
Higgins, H. A.	Little Rock
Hinkle, S. B.	Little Rock
Hoge, S. F.	Little Rock
Hollis, N. T.	Little Rock
Holmes, Glenn	Little Rock
Howell, A. R.	North Little Rock
Hummel, H. G.	Little Rock
Hundling, H. W.	Little Rock
Hyatt, D. T.	Little Rock
Jackson, Geo. F.	Little Rock
Johnson, G. H.	Little Rock
Jones, H. F. H.	Little Rock
Jones, James E.	Little Rock
Junkin, S. P.	Little Rock
Kilbury, M. J.	Little Rock
Kirby, A. C.	Little Rock
Kolb, A. C.	Hope
Kory, R. C.	Little Rock
Kriesel, W. A.	Little Rock
Lamb, W. A.	Little Rock
Langston, W. C.	Little Rock
Law, R. A.	Little Rock
Lawson, M. G.	Little Rock
Levy, Jerome S.	Little Rock
Lewis, Geo. V.	Little Rock
Lyons, V. E.	Little Rock
Mahoney, P. L.	Little Rock
May, C. B.	Little Rock
May, J. R.	Little Rock
McCaskill, M. E.	Little Rock
McCormack, G. A.	Little Rock

McLochlin, R. E.	Little Rock
McRae, W. M.	Little Rock
Melson, Madeline M.	Little Rock
Melson, O. C.	Little Rock
Meriwether, E. G.	Provo, Utah
Milliken, R. A.	Little Rock
Moore, R. D., Jr.	Little Rock
Morgan, Dolly	Little Rock
Murphey, Pat	Little Rock
Newman, W. V.	Little Rock
Norwood, Frank	Little Rock
Oates, C. E.	North Little Rock
Parmley, Val	Little Rock
Parsons, J. E., Jr.	Little Rock
Parsons, W. R.	Little Rock
Patterson, R. Q.	Little Rock
Phillips, Samuel	Little Rock
Pirnique, A. F.	Little Rock
Reagan, G. W.	Little Rock
Reagan, L. D.	Little Rock
Reaves, B. J., Jr.	Little Rock
Reed, C. C., Sr.	Little Rock
Reed, C. C., Jr.	Little Rock
Rhinehart, B. A.	Little Rock
Rhinehart, D. A.	Little Rock
Riegler, N. W.	Little Rock
Roberts, J. N.	Little Rock
Robinson, B. L.	Little Rock
Rodgers, Clyde D.	Little Rock
Rogers, F. O.	Little Rock
Roe, J. L.	Little Rock
Rosenbaum, Karl	Little Rock
Sadler, W. L.	Little Rock
Samuel, John M.	Little Rock
Sanderlin, J. H.	Little Rock
Saxon, R. L.	Little Rock
Scott, Homer	Little Rock
Shearer, W. F.	Little Rock
Shipp, A. C.	Little Rock
Shipp, Harvey	Little Rock
Shuffield, J. F.	Little Rock
Smith, R. T.	Little Rock
Snodgrass, W. A.	Little Rock
Stathakis, John	Little Rock
Stover, A. R.	Oak Park, Ill.
Strauss, A. W.	Little Rock
Summers, J. A.	North Little Rock
Switzer, D. M.	North Little Rock
Thatcher, Harvey S.	Little Rock
Thomas, P. E.	Little Rock
Thompson, E. I.	Little Rock
Thompson, G. D.	Little Rock
Vinsonhaler, Frank	Little Rock
Wallis, Chas.	Little Rock
Wassell, C. M.	St. Charles
Watkins, Anderson	Little Rock
Watkins, J. G.	Little Rock
Wayman, A. K.	Little Rock
Wayne, J. R.	Little Rock
Wayne, W. D.	Little Rock
Webb, V. T.	Little Rock
Weny, N. F.	Little Rock
White, E. H.	Little Rock
Witt, C. E.	Little Rock
Woern, W. H.	Little Rock

RANDOLPH COUNTY†

Baltz, M. A.	Pocahontas
Brown, J. W.	Pocahontas
Finney, Clarence	Maynard
Hamil, W. E.	Pocahontas
Handley, E. L.	Pocahontas
Loftis, J. R.	Pocahontas
Loftis, W. O.	Pocahontas
Ryburn, J. W.	Pocahontas
Smith, J. E.	Reyno
Smith, Oscar	Biggers

SAINT FRANCIS COUNTY

Bogart, C. N.	Forrest City
Bogart, J. A.	Forrest City
Burch, W. D.	Hughes
Caldwell, A. B.	Forrest City
Chaffin, E. J.	Hughes
Darnall, Ernest	Colt
Davidson, J. S.	Forrest City
McCown, N. C.	Forrest City
Powell, C. V.	Round Pond
Rush, J. O.	Forrest City
Winter, W. A.	Widener

SALINE COUNTY†

Ashby, J. W.	Benton
Blakely, M. M.	Benton
Buckley, E. A.	Bauxite
Buffington, T. E.	Benton
Burks, J. A.	Benton
Gann, Dewell, Sr.	Benton
Jones, C. W.	Benton
Welton, Chas.	Nome, Kansas
Ward, W. W.	Alexander
Waston, Thos. C.	Benton

SCOTT COUNTY

Bevill, Cheves	Waldron
Holitik, Geo. F.	Waldron

SEARCY COUNTY

Bing, E. A.	Marshall
Cotton, J. O.	Leslie
Daniel, S. G.	Marshall
Fendley, E. G.	Leslie
Henley, J. A.	Marshall
Leslie, J. O.	Marshall
Rogers, W. F.	St. Joe
Wood, E. W.	Marshall

SEBASTIAN COUNTY†

Adams, W. F.	Fort Smith
Amis, J. W.	Fort Smith
Arnold, W. O.	Fort Smith
Benefield, C. E.	Fort Smith
Benefield, J. H.	Fort Smith
Billingsley, C. B.	Fort Smith
Blair, A. A.	Fort Smith
Brooksher, W. R.	Fort Smith
Buckley, J. H.	Fort Smith
Bungart, C. S.	Fort Smith
Chamberlain, C. T.	Fort Smith
Coffman, J. S.	Lavaca
Dorente, D. R.	Fort Smith
Dorsey, H. C.	Fort Smith
Eberle, W. G.	Fort Smith
*Epler, E. G.	Ione
*Foltz, J. A.	Fort Smith
Foltz, T. P.	Fort Smith
Foster, M. E.	Fort Smith
Freer, B. W.	Fort Smith
Goldstein, D. W.	Fort Smith
Hall, C. W.	Greenwood
Henry, Louise	Fort Smith
Henry, L. M.	Fort Smith
Hoge, A. F.	Fort Smith
Holt, C. S.	Fort Smith
Honomichl, O. R.	Hackett
Johnson, Hugh	Fort Smith
Johnson, J. E.	Fort Smith
Jones, E. B.	Hartford
Jones, I. F.	Fort Smith
Kennedy, C. H.	Fort Smith
Krock, F. H.	Fort Smith
McConnell, S. P.	Booneville
Means, C. S.	Fort Smith
Moulton, E. C.	Fort Smith
Moulton, H.	Fort Smith
Nowlin, R. R.	State Sanatorium
Ogden, J. C.	Fort Smith
Redman, J. W.	Fort Smith
Riley, J. D.	State Sanatorium
Rose, W. F.	Fort Smith
Scott, M. H.	Jenny Lind
Smith, R. T.	Fort Smith
Smith, H. H.	Fort Smith
*Southard, J. D.	Fort Smith
Southard, J. S.	Fort Smith
Stevenson, J. E.	Fort Smith
Stubbs, S. P.	Fort Smith
Ware, B. L.	Greenwood
Weddington, R. E.	Fort Smith
Williams, C. Ray	State Sanatorium
Willingham, J. J.	State Sanatorium
Wolfermann, S. J.	Fort Smith
Woods, G. G.	Huntington
Woods, W. M.	Huntington
Wyatt, R. B.	Sulphur Springs
Yankoff, P. D.	Fort Smith

SEVIER COUNTY†

Archer, C. A.	DeQueen
Dickinson, R. C.	Horatio
Graves, J. C.	Lockesburg
Hanchey, C. C.	DeQueen
Hendricks, J. S.	DeQueen
Hendrix, B. E.	Gillham
Hopkins, R. L.	DeQueen
Jones, I. G.	DeQueen
Kimball, G. L.	DeQueen
Kitchens, C. E.	DeQueen
Norwood, M. L.	Lockesburg

UNION COUNTY†

Bottorff, M. K.	Rosston
*Brewer, J. M.	El Dorado
Cathey, A. D.	El Dorado
Clark, James	Forrest City
Crawford, J. B.	El Dorado
Cullins, J. G.	North Chicago, Ill.
DeBolt, G. C.	El Dorado
Fincher, L. G.	El Dorado
Ginn, W. T.	Calion
Hardin, M. A.	Norphlet
Harper, John W.	El Dorado
Harper, W. L.	Junction City
Irby, F. L.	El Dorado
Kennedy, C. E.	Smackover
LeVine, David	El Dorado
Mahony, F. O.	El Dorado
Mayfield, H. F.	Huttig
Mayfield, Hugh Jean	El Dorado
McCall, Daniel	Lawson
McGraw, S. J.	El Dorado
Mitchell, J. G.	El Dorado
Moore, B. L.	El Dorado
Moore, J. A.	El Dorado
Munn, E. J.	El Dorado
Murphy, G. D.	El Dorado
Murphy, H. A.	El Dorado
Muse, P. H.	Junction City
Newton, W. L.	Smackover
Patterson, W. L.	El Dorado
Purifoy, L. L.	El Dorado
Riley, Warren S.	El Dorado
Rowland, R. E.	Little Rock
Russell, M. V.	El Dorado
Sheppard, J. K.	El Dorado
Sheppard, J. M.	El Dorado
Slaughter, J. W.	El Dorado
Smith, D. V.	Huttig
Smith, J. M.	Smackover
Vines, F. P.	El Dorado
White, D. E.	El Dorado
Wharton, J. B.	El Dorado
Wharton, J. B., Jr.	El Dorado
Wozencraft, W. L.	El Dorado

WASHINGTON COUNTY

Baggett, Jeff	Prairie Grove
Callen, C. B.	Fayetteville
Ellis, E. F.	Fayetteville
Fowler, W. A.	Norman, Okla.
Gilbert, A. A.	Fayetteville
Gregg, A. S.	Fayetteville
Harr, H. T.	Fayetteville
Hathcock, A. H.	Fayetteville
Hathcock, Preston L.	Fayetteville
Hathcock, P. L., Sr.	Fayetteville
Haugen, I. J.	Los Angeles, Calif.
Henry, H. B.	Fayetteville
Henry, R. T.	Springdale
Howze, H. H.	Fayetteville
Huntington, R. H.	Fayetteville
Lesh, Ruth Ellis	Fayetteville
Lewis, James F.	Fayetteville
McAllister, Max	Texarkana
McCormick, E. G.	Prairie Grove
Miller, R. W.	Fayetteville
Mock, W. H.	Prairie Grove
Morrow, F. R.	Fayetteville
Richardson, Fount	Fayetteville
Riggall, Cecil	Prairie Grove
Robinson, J. A.	Summers
Sisco, C. P.	Springdale
Turner, R. J.	Fayetteville
Wentz, H. B.	Elkins
Wood, H. D.	Fayetteville

WHITE COUNTY

Abington, E. H.	Beebe
Allbright, S. J.	Searcy
*Clark, W. A.	Bald Knob
Dunklin, A. J.	Searcy
Felts, W. R.	Judsonia
Hardy, F. P.	Searcy
Hawkins, M. C., Jr.	Searcy
Hudgins, A. H.	Searcy
Peeler, C. M.	Pangburn
Sloan, D. W.	Beebe
Sloan, J. R.	Garner
Spain, A. L.	Letona

WOODRUFF COUNTY

Biles, L. E.	Augusta
Brewer, E. F.	Augusta
Dungan, C. E.	Augusta
Evans, R. H.	McCrory
Fraser, R. L.	McCrory
Hays, J. F.	Augusta
Maguire, F. C., Sr.	Augusta
Maguire, F. C., Jr.	Augusta
Morris, J. W.	McCrory
Murphy, Frank	Lexa
West, J. H.	Grays
Wilkins, W. T.	Cotton Plant

YELL COUNTY†

Ballenger, W. E.	Plainview
Haster, E. J.	Dardanelle
Montgomery, H. L.	Gravelly
Moore, J. H.	Delaware

PROCEEDINGS OF SOCIETIES

To Polk County Medical Society goes the honor of being the first to submit a 1938 report of membership with assessments, this being received on October 5th.

The third two-day course of postgraduate instruction sponsored by the Arkansas Medical Society was held at the University of Arkansas Medical School, Little Rock, September 29-30th. The following program was presented: "Anatomy of the female genitalia," W. C. Langston; "Pathological changes occuring in the uterus in infections and tumors," M. J. Kilbury; "Nonvenereal infections of the female genital tract," J. H. Sanderlin; "A discussion of uterine bleeding," R. J. Crossen; "Venereal infections of the female genital tract," R. E. Pryor; "Radiation treatment of fibroid tumors and menorrhagia," D. A. Rhinehart; "Radiation treatment of carcinoma of the uterus," S. B. Hinkle; "The endocrine glands as related to pelvic function and dysfunction," R. J. Crossen; "Some aspects of skeletal development," Byron Robinson; "Comments on the physiology of bone repair," C. H. McDonald; "Discussion of the value of x-ray in treating fractures," D. A. Rhinehart; "Emergency treatment of fractures," J. B. Jameson; "Problems of diagnosis and treatment of headaches," Temple Fay; "Mechanism of fractures," Kellog Speed; "Fractures of the Spine," Kellog Speed; "Fractures about the wrist and elbow," Val Parmley; "Fractures about the knee, leg and ankle," Vernon Newman; Fractures of the femur," Joe Shuffield.

The Tri-County Clinical Society met at Prescott September 30th for the following program: "Some Clinical Aspects of Eclampsia," O. G. Hirst; "Gallbladder Infections," F. A. Hughes, Jr., and "Case Reports-Demonstrations," A. S. Buchanan, all speakers of Prescott.

O. G. Hirst, Councilor.

The Fifth Councilor District Medical Society met at Camden October 7th for the following program: "Some Points Regarding Organized Medicine," O. J. T. Johnston, Batesville; "The Differential Diagnosis of Angina Pectoris and Coronary Occlusion, with Treatment of Each," W. C. Colbert, Memphis; "Treatment of Urinary Infections," Chester D. Allen, Memphis, and "Acute Surgical Abdomen," E. M. Holder, Memphis.

Polk County Medical Society has elected the following officers: President, H. G. Heller, Mena; Vice-president, J. G. Hilton, Mena, and Secretary-treasurer, F. A. Vandervoort.

The Tenth Councilor District Medical Society met in Fort Smith September 21st, electing the following officers: President, J. L. Post, Altus; vice-president, Earle A. Hunt, Clarksville, and Secretary-treasurer, L. M. Henry, Fort Smith. Morning clinics were conducted at Sparks Memorial and Saint Edwards Mercy Hospitals as follows: Surgical Clinic, C. S. Holt and F. H. Krock; Surgical Clinic, M. E. Foster; "Bronchoscopy as an Aid in Diagnosis," R. T. Smith; "Injuries Unique, made Prevalent by Present Day Highway Travel," T. P. Foltz; "Obstetrical Mortality," J. W. Amis; Compression Fractures of the Spine," S. J. Wolfermann; "Simplified Technique of Blood Transfusion," W. G. Eberle, and "Intraocular Malignancies," E. C. Moulton. Luncheon was served at both hospitals at noon and the following program was presented: "Boils," Clyde McNeil, Rogers; "The Therapeutic Value of the Intratracheal Use of Iodized Oil Combined with Elimination Measures and Specific Desentization in the Treatment of Intractable Asthma," Ray M. Balyeat, Oklahoma City; "The Female Castrate," Earle A. Hunt and G. R. Siegel, Clarksville, and "Interesting Events in my 40 Years of Practice 25 miles from a Railroad," George D. Counts, Wesley.

The Seventh Councilor District Medical Society met in dinner session at Benton, October 19th, for the following program: "Symposium on Pneumonia"—"The Pathologist's Contribution," D. C. Lee, Hot Springs National Park; "Treatment Through Forty Years," Dewell Gann, Sr., Benton, and "Where are We Headed?" John Ashby, Benton.

The sixteenth session of the Fort Smith Clinical Society, October 12, was dedicated to the following members of organized medicine in northwest Arkansas who have practiced for fifty years: F. G. Eubanks, Decatur; E. F. Ellis, Fayetteville; A. S. Gregg, Fayetteville; H. D. Wood, Fayetteville; H. Moulton, Fort Smith; E. G. McCormick, Prairie Grove; W. J. Curry, Rogers; M. S. Dibrell, Van Buren; Cheves Bevill, Waldron; J. C. Blackwood, Western Grove; F. C. Mullins, Grannis, and J. I. Thompson, Yellville. Morning operative and dry clinics were conducted at Sparks Memorial Hospital by I. Fulton Jones and T. P. Foltz; "Clinical Significance of the Systolic Murmur," C. T. Chamberlain, and "Constitutional Effects of Rectal Disease," Ralph Crigler. At the noon-day luncheon period, the following talks

were presented": "Use of Parenteral Fluid," I. F. Jones; "X-ray Treatment of Infections," Fred Krock; "Recent Advances in Diagnostic Roentgenology," W. R. Brooksher; "Bronchiectasis," T. P. Foltz, and "The Use of Protamine Insulin," A. A. Blair. The afternoon session was addressed by H. Moulton, Fort Smith, 'Fifty Years of Medicine"; "The Irritable Heart Syndrome and Its Accompaniments," T. J. Dry, Rochester, Minnesota, and "The Treatment of Disturbances of Genital Physiology Among Women," L. M. Randall, Rochester, Minnesota.

The First Councilor District Medical Society met at Jonesboro October 14th for the following program: Address of Welcome, P. W. Lutterloh, Jonesboro; Response, W. M. Majors, Paragould; "Congenital Malaria," J. H. McCurry, Cash; "A Critical Review of Our Progress in Therapeutics," Joe Verser, Harrisburg; President's Address, J. C. Land, Walnut Ridge; "Treatment of Syphilis," F. H. Jones, Piggott; "The Acute Abdomen," T. C. Guthrie, Smithville; "Diagnosis and Treatment of Undulant Fever," J. H. Lamb, Paragould, and "Angina Pectoris," F. L. Husbands, Blytheville. Luncheon was served at noon.

The Third Councilor District Medical Society met at Brinkley October 6th for the following program: "Intestinal Disturbances in Children," W. L. Rucks, Memphis; "Pre-natal Care," Clyde Rodgers, Little Rock; "Diagnosis and Treatment of Skin Diseases Common to the General Practitioner," R. Q. Patterson, Little Rock and "Diagnosis and Treatment of Common Infections of the Urinary Tract," H. R. Raines, Memphis. Musical selections featured the dinner which followed the scientific session. The following officers were elected: C. H. McKnight, Brinkley, President; W. A. Winter, Forrest City, Vice-president, and Thos. Wilson, Secretary-treasurer. The society will next meet at Hazen.

The Mississippi County Medical Society met in Blytheville October 5th for the following program: "Tumors of the Breast," Chas. Andrews, and "Diagnosis and Treatment of Gallbladder Disease," R. L. Sanders, both speakers of Memphis. W. A. Regnier was elected to membership.

F. D. SMITH, Secretary.

The Benton County Medical Society met in dinner session at Bentonville October 14th for an address by Fount Richardson, Fayetteville, "My Trip to Europe."

GEO. M. LOVE, Secretary.

The Second Councilor District Medical Society met at Batesville October 11th in joint dinner session with the Auxiliary. The following scientific program was presented: "Clinical and Microscopic Study of the Endometrium," M. E. McCaskill and M. J. Kilbury, Little Rock; "Three Case Reports with Exhibition of Specimens," A. S. Buchanan, Prescott, and "Some of the Common Rectal Diseases," Hoyt R. Allen, Little Rock. Officers elected are K. K. Kimberlin, Tuckerman, President; S. J. Allbright, Searcy, Vice-president, and O. J. T. Johnston, Batesville, Secretary-treasurer. The society will next meet in Batesville.

White County Medical Society has elected the following officers: President, S. J. Allbright, Searcy; Vice-president, C. M. Peeler, Pangburn; Secretary-treasurer, A. J. Dunklin, Searcy; Delegate, S. J. Allbright, and Alternate, F. P. Hardy.

The Washington County Medical Society was addressed October 5th by P. L. Hathcock, Fayetteville, on "Notes on Anesthesia."

FOUNT RICHARDSON, Secretary.

The Pulaski County Medical Society will hold its annual dinner honoring Dr. O. J. T. Johnston, President, Arkansas Medical Society, at the Concordia Club, Little Rock, November 8th at 7:00 p. m. All past-presidents of the Society will be guests of honor for this meeting. The speaker will be John E. Musser, Professor of Medicine, Tulane University of Louisiana.

OBITUARY

NEHEMIAH IRVING STEBBINS, aged 67, died at his home in Nashville September 21st. A native of Detroit, he graduated from the University Medical College of Kansas City in 1904, teaching at this institution for several years before opening a hospital at Clinton, Missouri. He remained in charge of this institution for 22 years, subsequently moving to Eureka Springs. For the past two years he had practiced in Nashville, founding the Nashville Hospital. He was a member of the Howard-Pike County Medical Society and of the Arkansas Medical Society and was president of the Nashville Rotary Club at the time of his death. Surviving relatives are his wife, four sisters and a brother.

PERSONALS AND NEWS ITEMS

Dr. and Mrs. H. Moulton, Fort Smith, celebrated their golden wedding anniversary September 21st.

"The Diagnostic Value of Venous Pressure Determinations in Certain Diseases" by Rufus D. Moore, Jr., Little Rock, appeared in the Southern Medical Journal for October.

H. Fay H. Jones recently addressed the Little Rock Rotary Club on "How European Hospitals Do It."

M. L. Cantrell has moved from Luxora to Marked Tree.

S. P. Junkin, Little Rock, spent a September vacation in Florida and southeastern points.

M. S. Craig has been elected president of the Batesville Kiwanis Club.

Appointed as Advisory Council of the Maternal and Child Health Division, Arkansas State Board of Health, are the following: O. J. T. Johnston, Batesville; A. C. Kirby, Little Rock, and W. R. Brooksher, Fort Smith, together with representatives from the dental profession and various welfare agencies.

Arkansas was represented at the International Congress of Radiology by Geo. F. Jackson, B. A. Rhinehart, Little Rock; J. S. Wilson, Monticello; C. H. Nims, Hot Springs National Park, and F. H. Krock, Fort Smith.

A. C. Watson, Haskell, visited nervous and mental hospitals in the east during September.

MARRIED—At Searcy, September 26th, B. D. Luck, Jr., Pine Bluff, and Miss Rebecca Jane Jackson.

T. F. Hudson is erecting an office building at Luxora.

W. C. Riggins, Hamburg, and D. W. Dykstra, Morrilton, are taking a public health course at Vanderbilt University.

Ralph Crigler, Fort Smith, recently addressed the Kiwanis Club on "Nostrums and Quackery."

Drs. Ulys and Lloyd Jackson have opened their new clinic and hospital at Harrison.

An office building is being constructed for Dr. R. D. Dickens at Monticello.

Doyle Fulmer has assumed duty as malariologist for the State Board of Health.

BORN—A daughter to Dr. and Mrs. W. B. Grayson, Little Rock, on August 26th.

J. E. Johnson, health officer of Fort Smith, is taking a three months course in public health at Vanderbilt University.

MARRIED—At Fayetteville, August 28th, J. L. Post, Altus, and Mrs. Annette McNeil, Fort Smith.

M. Y. Pope has been elected surgeon of the Monticello American Legion post.

Val Parmley, Little Rock, and Euclid Smith, Hot Springs National Park, attended the recent session of the American Congress of Physical Therapy in Cincinnati.

F. W. Carruthers and Geo. F. Jackson, Little Rock, addressed the East Texas District Medical Society at Atlanta, Texas, October 13th on "Fracture Problems" and "Cancer of the Skin," respectively.

R. L. Smith has been elected to the Board of Governors of the Russellville Chamber of Commerce.

The Little Rock Medical Arts club has elected the following officers: President, Estes Allen; Vice-president, W. V. Newman; Recording-Secretary, R. A. Milliken; Secretary, J. E. Roberts, and Treasurer, R. C. Cook.

F. Walter Carruthers, Little Rock attended the 25th Anniversary meeting of the Clinical Orthopedic Society in Chicago during October.

J. P. Price, Monticello, has been appointed Chairman for the Christmas Seal sale in Drew county.

W. A. Regnier, formerly of the State Hospital, has located at Blytheville.

W. O. Arnold, Fort Smith, recently addressed the Kiwanis Club of that city on tuberculosis.

J. C. Ogden, Fort Smith, and Raymond Cook, Little Rock, attended the meeting of the American Academy of Opthalmology and Otolaryngology at Chicago in October.

Among those in attendance at the meeting of the Kansas City Southwest Clinical Society in October were: C. A. Archer, G. C. Kimball, DeQueen; W. G. Hodges, Malvern; D. A. Rhinehart, S. B. Hinkle, Little Rock, and C. H. Kennedy and S. J. Wolfermann, Fort Smith.

Samuel Phillips and Charles Wallis, Little Rock, have been elected to fellowship in the American Academy of Pediatrics.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

The Women's Auxiliary to the Independence County Medical Society met in dinner session at the Marlin Hotel September 14th. A theater party followed the dinner. Ten guests were present for the dinner and additional guests joined for the theater party. Mrs. Laman A. Gray, of Baltimore, was an out-of-town guest.

Mrs. Rodman, Corresponding Secretary.

Mrs. N. S. Word was hostess at a dinner for the Woman's Auxiliary to the Ouachita County Medical Society September 2nd at the Orlando Hotel. Fourteen members were present and were served a delicious four course dinner. White pottery bowls of mixed garden flowers were used at the tables. Mrs. R. B. Robins presided during the dinner meeting. Mrs. S. A. Davison presented an interesting program with Mrs. S. A. Thompson and Mrs. Davison making the talks of the evening. Mrs. Homer Livingston, accompanied by Miss Elizabeth Copeland, played several selections on the violin and Miss Maxine Furlow gave several dances.

The first meeting of the fall season of the Women's Auxiliary to Bowie and Miller County Medical Societies, September 24th, took the form of a luncheon honoring Mrs. N. B. Daniel, incoming president of the group.

The luncheon took place at the home of Mrs. William Hibbitts. Hostesses were: Mrs. Hibbitts, Mrs. A. Collom, Mrs. S. A. Collom, Mrs. L. H. Lanier, Mrs. E. L. Beck, Mrs. J. T. Robison, Mrs. Decker Smith, Mrs. T E. Fuller and Mrs. L. J. Kosminsky. The house was charmingly decorated with pink roses and coral vine. The same flowers were used as decorations in bubble bowls on the five tables used for the guests.

Thirty members and guests were present. Mrs. P. H. Phillips of Ashdown an out-of-town member was present. Guests were Mrs. John Porter, Mrs. M. L. McAllister and Miss Margaret Newberry.

After luncheon Mrs. Daniel made a talk, and Mrs. Harry E. Murry was the principal speaker on the program. Her topic was "What Every Auxiliary Member Should Know.

AN AUXILIARY MEMBER SHOULD KNOW

A Medical Auxiliary serves the Medical Profession and through it the public. Such service is satisfactory, because it is unselfish. An Auxiliary is always organized with the permission of the Medical Society and should have an Advisor or Advisory Committee to direct it. The Auxiliary should make an annual report to its Society and undertake no new project without approval.

The principal functions of an Auxiliary are: health education, public relations, legislation (reserve force), philanthropy, social.

The laity requires education, but it should be given through the Medical Profession, so there may be rational control of what the public thinks and does in health activities. Most important objectives of an Auxiliary are to direct public thinking and actions in channels the Medical Profession desires and to extend authentic information on health. We support an organization only when we are a member and understand the tasks and objectives and how to accomplish them. An Auxiliary member, therefore, should attend as many meetings as possible, so she may:

1. Understand the purposes and objectives of her Auxiliary.
2. Receive the particular charge given by local, state, national.
3. Receive instruction in how to fulfill that charge.
4. Become informed generally about:
   a. personal and community hygiene.
   b. administering of local, state, national health.
   c. medical and health laws, local, state, national.
   d. the health of her community.
   e. communicable diseases; their prevention and control.
   f. her health in relation to her community.
   g. general problems of health all should know.
   h. approved educational material; where to obtain it.
   i. the development of the Medical Arts.
   j. why the A. M. A. urges the promotion of Hygeia; how done.
   k. what legislation the Medical Society sponsors; why; how the Auxiliary acts as a reserve force; what the individual may do.
   l. philanthropic work related to the Medical Profession; service by her Auxiliary; what her Auxiliary is doing; why.
   m. what lay organizations are doing in community in health.

HOW DOES A MEMBER SUPPORT HER AUXILIARY?

By:

1. Paying dues.
2. Attending meetings.
3. Accepting offices, and chairmanships in other organizations, especially those related in health, so
   a. informed speakers may address them.
   b. approved material may be given.
   c. programs and projects to be undertaken shall be scientifically sound.
   d. so she may keep informed about medical matters and activities in other organizations.
   e. report to her President and Society, programs and projects which are unwise and unacceptable; report to be made through advisors.
4. Promoting good fellowship by affability at meetings; by attendance at entertainments and conventions; by assisting as requested.
5. By fulfilling the charges given through the advisors.

The busy wife is an asset to the Auxiliary, if she is an INFORMED MEMBER, because she has many opportunities to carry the aims and decisions of the Medical Profession and keep health leadership where it belongs—With the Profession. As a member, she may speak with authority, receive respect and attention that will be

missing as an unattached doctor's wife. It is not necessary to partake of every phase of Auxiliary work to be a good member, only what one can do. She should know when to keep quiet, when to report to advisors; when to answer and what to say.

If for no reason but to assemble regularly and study the history of the Medical Arts and the Medical Heroes, an Auxiliary would be worth-while, because it would give wives an understanding of the supreme unselfishness and the greatness of the profession.

The time has come when the Auxiliary has so proved its worth that the question is not, "Are you an Auxiliary member?" but "Why are you not a member?"

The Auxiliary to the Southeast Arkansas Medical Society enjoyed a lovely chicken dinner with the doctors at the Dermott Methodist church, September 20th. The Auxiliary was entertained at the home of Mrs. E. E. Barlow where the business was carried on with eight members present. During the social hour, the hostess served delicious refreshments. The organization now has twenty-one paid up members.

Mrs. J. S. Southard assumed leadership of the Auxiliary to the Sebastian County Medical Society and named her standing committees for the year, October 11, at a luncheon meeting at the Woman's Clubhouse when officers were installed and the Auxiliary resumed its schedule of monthly meetings.

Mrs. S. J. Wolfermann, outgoing president, became vice-president. Other officers installed were Mrs. Everett Moulton, secretary; Mrs. C. S. Bungart, treasurer; and Mrs. W. F. Rose, publicity chairman.

Committee appointments announced by Mrs. Southard were: Hygeia, Mrs. D. W. Goldstein; public relations, Mrs. B. Wayne Freer, Mrs. I. Fulton Jones, Mrs. Thomas P. Foltz; program and public health, Mrs. W. R. Brooksher, Jr., Mrs. Eugene Stevenson; membership, Mrs. Charles S. Holt, Mrs. Arthur F. Hoge; courtesy, Mrs. Wolfermann, Mrs. Eberle; telephone, Mrs. Raymond Smith, Mrs. M. E. Foster, Mrs. A. A. Blair, Mrs. H. C. Dorsey.

The Auxiliary voted to continue contributing subscriptions of Hygeia to Carnegie Library, Young Woman's Christian association, the Girl's club and 12 rural schools. Mrs. Foltz and Mrs. W. F. Adams were admitted to membership in the auxiliary.

Present for the meeting in addition to Mrs. Southard and Mrs. Wolfermann were Mrs. Goldstein, Mrs. Moulton, Mrs. Foltz, Mrs. Jones, Mrs. F. H. Krock, Mrs. Bungart, Mrs. Adams and Mrs. Rose.

The outgoing officers besides Mrs. Wolfermann were Mrs. Pierre Redman, vice-president, who has moved to Mena; Mrs. M. E. Foster, secretary; Mrs. Raymond Smith, treasurer.

MRS. W. F. ROSE,
Publicity Chairman.

EXAMINATIONS: AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The next examinations (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada on Saturday, November 6, 1937, and Saturday, **February 5, 1938.** Application for admission to the examinations must be filed on an official application form in the office of the Secretary at least sixty days prior to these dates.

The general oral, clinical and pathological examinations for all candidates (Groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13 and 14, 1938, immediately prior to the meeting of the American Medical Association.

Application for admission to Group A examinations must be on file in the Secretary's Office before April 1, 1938.

For further information and application blanks address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pa.

The opening of the North Mississippi Community Hospital at Tupelo, Mississippi, on October 3rd gives the northeastern part of this state a modern, fireproof well-equipped 50-bed hospital held in trust for the public, open to all qualified physicians and designed to serve the sick without discrimination.

This is the eighth such hospital to be built with the aid of the Commonwealth Fund of New York, which is now undertaking to provide one new hospital each year for a predominantly rural community which will agree to meet its share of costs and to run the institution in accordance with generally accepted standards. The ninth in the group is now under construction at Ada, Oklahoma, and the tenth has been awarded to the community centering in Provo, Utah.

The Fund began this project in 1926 as an experiment in meeting the need of rural communities for better medical and other health services. It was known that adequate hospital facilities were lacking in many rural districts, that recent graduates from medical schools were not entering rural practice in proportion to local needs, and that in spite of substantial progress in some parts of the country, health services in rural areas were not so well developed as those usually found in cities. It was assumed that the presence of well planned and well conducted hospitals would to some degree correct this situation, and experience in half a dozen different states indicates that the hope was justified.

The present plan is to aid in establishing hospitals having a capacity of between 25 and 50 beds and easily accessible to a rural community having a population large enough to make good use of such accommodations and capable of meeting operating costs. The hospital may either be a totally new institution, or may replace existing facilities which are clearly inadequate. The Fund furnishes, plans, specifications, and architectural supervision for the construction, and not less than $200,000 as a contribution toward capital costs. It advises in the organization of the hospital corporation and the medical staff, offers assistance in meeting the administrative problems of the early years and provides a number of fellowships for postgraduate study by members of the medical stalff.

Communities needing a 50-bed hospital are required to raise from $40,000 to $60,000 for their share of the capital cost and must provide in addition a site (with service connections) and from $10,000 to $15,000 to meet the deficit of the first year's operation. Ownership and administrative responsibility are lodged in a local corporation, organized not for profit, which contracts with the Fund to operate the hospital in agreement with specified standards. These standards are such as to guarantee its integrity as a community institution and to justify its approval by the American College of Surgeons.

Hospitals founded under this program are now operating in Murfreesboro, Tennessee; Farmville, Virginia; Glasgow, Kentucky; Farmington, Maine; Wauseon, Ohio; Beloit, Kansas; and Kingsport, Tennessee.

BOOK REVIEWS

The Business Side of Medical Practice: By Theodore Wiprud, Executive Secretary of The Medical Society of Milwaukee County; Lecturer in Medical Economics at the Marquette University School of Medicine. 177 pages with 21 illustrations. Philadelphia and London: W. B. Sanders Company, 1937. Cloth, $2.50 net.

With his previous business training in the business world followed by nearly sixteen years of intimate association with physicians, the author must by now be well nigh immune to any heresy of business conduct which he finds among his professional friends. It is but natural that he has endeavored to interest the medical man with the business aspect of his profession, a missionary effort with, perhaps, scant appreciation. In this volume it is the aim of the author to interest the physician in this important phase of medical service. Seventeen chapters, remarkably well written for the understanding of the average physician, discuss office equipment, records, accounts, legal questions, investments, wills, writing, public speaking and allied subjects. To the physician who desires to keep abreast, not only with scientific advance, but who earnestly seeks to provide for his future security and that of his family and to properly evaluate the extra-medical relations of medical service, this entirely different book is the answer.

Flying Vistas By Isaac H. Jones, M. A., M. D., Officer in Charge, "Care of the Flier," Military Aeronautics, U. S. Army, during the World War; Medical Examiner, Bureau of Air Commerce. Pp. 255. Illustrated. Price $2.00. Philadelphia: J. B. Lippincott Company, 1937.

In this volume the author recounts the history of aviation medicine, primarily as developed during the World War, interspersing his story with anecdotes and personal experiences. Written in most simple terms, the book is essentially for the layman, but we are of the belief that the commercial pilot will here obtain the answers to his unasked questions, the reasons for the various tests to which he has submitted himself over these years, with never an exact understanding as to the "why" of the medical examiner's method. The story of the human body and mind, for those who want a more intelligent understanding of themselves, is here revealed in a fascinating manner, using the pilot as the laboratory specimen.

The Principles and Practice of Clinical Psychiatry. By Morris Braude, M. D., Associate Clinical Professor of Psychiatry, Rush Medical College, The University of Chicago. Attending Psychiatrist, Cook County Psychopathic Hospital, Chicago. Pp. 382. Illustrated. Price $4.00. Philadelphia: P. Blakiston's Son and Company, 1937.

Dr. Braude has written a book on psychiatry which should prove most helpful to the student of medicine as well as the physician, and along with psychiatric problems he has not lost sight of the association with the problems of internal medicine.

His classification of mental disease is, with few minor changes, that sponsored by the American Psychiatric Association, and his description of the different mental diseases is clear and concise, giving one a cross section of a particular disease without a great amount of reading.

Emotional Adjustment in Marriage. By Le Mon Clark, M. S., M. D., Assistant in Obstetrics and Gynecology, University of Illinois College of Medicine. Pp. 261. Price $3.00. Saint Louis: C. V. Mosby Company, 1937.

In a readable, sensible manner this volume presents the facts bearing upon a satisfactory adjustment of the sex side of married life. The sexual life is fully considered in its relation to the individual, the family and society. Birth control in principle and in practice is especially considered. We know of no work which so adequately presents the subject matter as does this volume.

Health Education of the Public. A Practical Manual of Technic: By W. W. Bauer, B. S., M. D., Director, Bureau of Health and Public Instruction, American Medical Association; Associate Editor of Hygea, The Health Magazine; and Thomas G. Hull, Ph. D., Director, Scientific Exhibit, American Medical Association; Associate Professor of Bacteriology, University of Illinois, College of Medicine. 277 pages with 39 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth $2.50 net.

Here is made available to the health educator, in whatever agency he works, the experience of Dr. Bauer as Director of Health and Public Instruction, and Dr. Hull as Director of Exhibits for the American Medical Association. It is supplemented by advice of other experts and by comprehensive lists of sources of materials.

Controversial problems, such as "school health education," are avoided, and likewise the theories of psychology in education. It is for the education of the adult on health matters.

They present several methods of informing the public, such as radio, newspapers, meetings, motion pictures, etc.

Cooperation of health officers and local physicians with local editors on health questions is suggested.

He gives the importance of the personal letter in health education programs, a simple matter which has been neglected. The importance of a well balanced program in health education is also mentioned.

This book, with its practical helpful suggestions, illustrations and lists of subjects, should be in all health libraries.

The Injection Treatment of Hernia. By Carl O. Rice, M. D., F. A. C. S., Instructor in Surgery, University of Minnesota School of Medicine. Pp. 278. 83 illustrations. Price $4.50. Philadelphia: F. A. Davis Co., 1937.

This monograph contributes materially to our knowledge of the treatment of hernia. It embraces the subject completely and the details of technique are well described and clearly illustrated. The author gives ample space to the importance of selecting cases for the injection treatment. The indications and contra-indications are clearly outlined. The chapter on anatomy deals in an admirable manner with the anatomical structures involved in hernia and gives their relation to this method of treatment. Anyone intending to use this method of treatment will do well to study this monograph, because, although it proves that injection treatment of hernia is a valuable adjunct to our armentarium, it also proves that the way is fraught with danger for those who use it promiscuously without proper study of the anatomy, technique and contraindications.

Psychiatric Nursing. By William S. Sadler, M. D., Chief Psychiatrist and Director, The Chicago Institute of Research and Diagnosis; Consulting Psychiatrist to Columbus Hospital. In collaboration with Lena K. Sadler, M. D., Associate Director, The Chicago Institute of Research and Diagnosis, Medical Director, the North Side Rest Home, etc., and Anna B. Kellogg, R. N., Chief of Nurses, the Psychiatric Clinic of the Chicago Institute of Research and Diagnosis, etc. Pp. 433. 19 illustrations. Price $2.75. Saint Louis: C. V. Mosby Company, 1937.

Dr. William Sadler and his co-workers have produced a book much needed by the nursing staff of mental hospitals and by any nurse called upon to take care of mental patients. This book is of especial value because of its readability, its practical character, in addition to its comprehensive outline of mental diseases.

To begin with, the author describes briefly the anatomy of the nervous system and the mental mechanisms. He is precise in his statements and omits all those unnecessary details that complicate definitions. The symptoms of mental disorders are defined in general and a working classification of the nervous psychoses is formulated.

Following this introduction, both major and minor psychoses are described and differentiated. As each type of disease is surveyed, practical suggestions to the nurse are brought out and definite aims stated.

The chapter entitled "The Psychiatric Nurse" is the outstanding one of the book. The psychiatric nurse must be more than just a nurse. She is a "confidential friend." She must be taught in addition to the methods of psychiatric treatment the reasons for such. Her most desired characteristic is cheerfulness and under no circumstance should she show evidence of disappointment in any of the patient's actions.. The doctor can talk to the patint and uncover his intricate problems but it depends upon the nurse who remains with the case throughout the day to re-educate the patient to normal reactions away from his conflicts. Because of the close relationship between the nurse and the patient, it is of great importance that the nurse be free from conflict herself. She must be prepared to exercise infinite patience.

In closing the book, occupational therapy and physical therapy are discussed. As the doctor prescribes some type of activity, it is the nurse who watches the course and prevents fatigue and loss of interest.

Obstetric and Gynecologic Nursing. By Frederick H. Falls, M. S., M. D., F. A. C. S., Professor of Obstetrics and Gynecology, University of Illinois College of Medicine; Attending Gynecologist, Cook County Hospital, Chicago, etc., and Jane R. McLaughlin, B. A., R. N., Supervisor of the Department of Obstetrics and Gynecology, Research and Educational Hospital, etc. Pp. 492. 83 illustrations. Price $3.00. Saint Louis: C. V. Mosby Company, 1937.

The authors of this new text for nurses have adhered to the most essential principles in teaching, brevity and clearness in the discussion of the text and profuse illustration by means of black and white sketches which are especially well adapted to the subject. The book is divided into two sections. The first deals with the essentials of obstetric nursing, inclusive of operative obstetrics, and the second is devoted to gynecologic nursing. In an effort to combine the information essential to both private duty and surgical nursing, the text appears to be a little too intensely clinical for teaching purposes in neophyte courses, but is excellent for advanced training. The authors are to be congratulated upon the brevity and forcefulness of the text, which lends itself so readily to the needs of the instructor. The excellent illustrations of Charlotte S. Holt do much to make the book outstanding. Both as a reference text and for general class instruction, this book should meet with the hearty approval of those who are interested in the teaching of nurses.

The Technic of Local Anesthesia. By Arthur E. Hertzler, A. M., M. D., Ph. D., LI. D., F. A. C. S., Professor of Surgery, University of Kansas; Surgeon to the Halstead Hospital, Halstead, Kansas. Pp. 284. Illustrated. Sixth edition. Price $5.00. Saint Louis: V. C. Mosby Company, 1937.

The author describes all types of local anesthesia, indicating his preference for local infiltration. Many of the procedures are illustrated. A concise account of the neurological anatomy of each region is given. The appearance of the sixth edition would seem to fairly indicate the esteem in which this work is held by those doing local anesthesia.

Dr. Colwell's Daily Log for Physicians: Price $6.00. Champaign, Illinois: Colwell Publishing Company, 1937.

This superior system of medical bookkeeping was devised by a physician with an excellent background of city and country practice. It is edited annually by him in the light of new needs suggested by users. An additional record supplied this year is a social security payment register. This is the most satisfactory record system for the practicing physician of which we have knowledge and we feel that trial of it for one year will make for its permanent installation.

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MEDICAL MANAGEMENT OF GALL BLADDER DISEASE*

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An intelligent medical or surgical regime for the management of biliary tract disease is necessarily dependent upon a reasonably thorough conception of the fundamental physiological and pathologico-physiological principles involved with special reference to the clinical application of such principles as they are evolved in the experimental laboratory. Perhaps the surgeon may well stress the anatomical, while the internist, looking to his laurels, must perforce emphasize the functional aspects of this particular problem. It is not the purpose of this presentation, however, to array the medical in the sense of the conservative, against the surgical, in the sense of the radical, treatment of gall bladder disease. More appropriately, these two ostensible extremes should be considered from the standpoint of cooperation and employed in conjunction one with the other; for after all is said and done, never would the internist be so presumptuous as to deny that some diseased gall bladders are amenable to surgery, while as, Rehfuss has so aptly put it, no real surgeon, in performing a cholecystectomy, can believe that he has done more than remove an end-result of a pathological process, not the only end-result and certainly not the causative factor, even though distressing symptoms may have been alleviated.

I do wish to discuss in general terms the principles underlying a medical regime for biliary disease, and this in turn makes it necessary to summarize briefly our present conception of gall bladder physiology, a conception which is in rapid flux as we learn to apply clinically the information that comes to use from the research laboratories.

Medical knowledge of diseases of the gall bladder may be said to date from the fourteenth century when the observation of gall stones at necropsy was first reported. The study of cholecystitis has been limited to the past century, while detailed knowledge of the normal function of the gall bladder has been obtained only within the past decade or two. A better understanding of the normal function of the gall bladder on the other hand has necessitated a recession of the theories regarding the pathogenesis of both cholecystitis and cholelithiasis.

Consensus of opinion would have it that the gall bladder should be considered as part of a mechanism whereby the secretory activity of the liver is correlated with that of the gastro-intestinal tract. In the fasting state of the normal individual, the liver is active but the amount of bile secreted is relatively small. The gall bladder is partially filled with concentrated bile of which the bile salts are the most important constituent. The sphincter at the end of the common duct (and recently there has been great controversy as to whether there is actually a discrete sphincter as such or whether the sphincter mechanism is merely a function of duodenal muscle tonus) allows amounts of bile to enter the duodenum only at infrequent intervals and most of the bile secreted by the liver during the fasting period flows into the gall bladder. As soon as the ingested food, however, passes the pylorus, the chyme causes the sphincter to relax and coordinately with this, the gall bladder expels a portion of its contents. The bile salts are rapidly absorbed from the intestine and stimulate the liver to increased activity. With this greater production of bile, there is an increase in its flow to and from the gall bladder. With the stomach empty and chyme no longer pouring over the papilla of Vater, the sphincter opens less frequently and gradually the secretory activity of the liver is reduced to that of the fasting state. It, therefore, would appear that the function of the gall bladder is to provide a reserve of concentrated bile which is valuable, not only in actual digestion, but also as a means of stimulating the liver to increased activity at the time the pro-

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cess of digestion is at its height in the duodenum. The fact that bile is secreted more or less continuously but discharged intermittently, is then a significant factor in the production of gall bladder pathology.

The data on which this working hypothesis is based are varied and in many instances still a subject for controversy. The ability of the gall bladder to concentrate bile has, however, been definitely proven by Mann and Bollman. Whether substances other than water and inorganic salts are absorbed is still under debate. There would seem, on the one hand, to be some evidence for assuming that the gall bladder is able to absorb bile salts from the contained bile. On the other hand, the fact that the gall bladder normally contains several times as much bile salts as hepatic bile, suggests that such absorption is small relatively when compared to the accompanying absorption of water.

The deposition of lipoid material or, more particularly, cholesterol in the mucous membrane of the gall bladder has been termed the "strawberry gall bladder" by MacCarty and, more recently, "cholesterosis" by Mentzer. The pathogenesis of this condition has been a source of much controversy. Some investigators hold that it is evidence of absorption of cholesterol from the bile by the epithelium of the gall bladder; others hold that the gall bladder secretes cholesterol into the bile. Still others insist that the wall of the gall bladder behaves as a semipermeable membrane and that passage of cholesterol in or out depends on the relative concentration in the blood and bile. In any case, the concentration of cholesterol in gall bladder bile as compared to that in hepatic bile is relatively much greater than that of other biliary constituents.

Until recently it was a question as to whether the gall bladder ever really empties. The introduction of cholecystography by Graham and Cole has done much to answer this question. When cholecystography is combined with duodenal drainage, the results in normal individuals may be dramatic. In such an experiment the patient is given the dye in the usual way. The following morning, duodenal drainage is started. If successful, dilute bile (the A bile of Lyon), is obtained. This bile contains little if any dye. Roentgenograms show the tip of the tube in place in the duodenum and a distended gall bladder. Stimulation by magnesium sulphate or olive oil then produces a flow of dark concentrated bile (B bile) containing much dye. This is followed by a flow of light bile (C bile) containing little dye. Roentgenograms at the end of the experiment show a marked reduction in the size of the gall bladder. While such experiments show that the gall bladder does empty, there is an extensive experimental literature which indicates that it perhaps never empties completely, as does the urinary bladder, and several days may elapse before the entire content at any one particular time is removed.

Once it is accepted that the gall bladder does empty into the duodenum, the question of the mechanism involved becomes paramount. The effect of respiratory movements, changes in intra-abdominal pressure, the elasticity of the viscus, variations in the tonus of the duodenal wall or of the sphincter of Oddi, and the existence of a reciprocal innervaton between the sphincter and the gall bladder have been discussed at length. More recently, attention has been focused on the role of the intrinsic musculature of the gall bladder. Various observers have noted that when the gall bladder or common duct is connected to a manometer there are small rhythmic variations in pressure that could be interpreted as due to contractions. Cholecystography furnishes at least presumptive evidence that contractions may occur in man as well as experimental animals. Furthermore, Ivy has shown the presence in animals of a hormonal mechanism (cholecystokinin) which produces contraction of the gall bladder. He believes that the efficiency of such fatty substances as cream, egg yolk, and olive oil in producing contraction and emptying of the gall bladder is to be explained by their action in stimulating the production of cholecystokinin in the mucosa of the duodenum rather than to a specific stimulatory effect of these materials either on nerve endings in the duodenum before absorption or on the wall of the gall bladder after absorption. Ivy has also shown the effectiveness of cholecystokinin in causing emptying of the gall bladder in man.

The importance of the sphincteric mechanism at the duodenal end of the common duct must not be minimized. Ivy, and others, have recently reported experiments on a human subject in whom, after the injection of the cholecystokinin solution, gall bladder pain was produced by the contraction of the latter viscus concurrently with the development of spastic obstruction of the intramural portion of the common bile duct. In this case the intraduodenal administration of magnesium sulphate was effective in relieving the spasm and distress. Since cholecystokinin is formed after the eating of fats, functional

disturbances analogous to those in the subject reported by Ivy, may explain some of the intolerance to fats, which is a frequent complaint of patients with chronic cholecystitis.

It is manifestly impossible at the present time to discuss, in detail, the pathologic lesions involving the biliary tract. Chronic cholecystitis with or without an accompanying cholelithiasis greatly exceeds all other lesions in frequency and medical importance. The problems concerned with the cause and formation of gall-stones are by no means settled. It is now recognized that the gastro-intestinal disturbances, which Moynihan considered the "inaugural" symptoms of gall-stones, are the symptoms of cholecystitis and have no direct connection with the presence of stones. Whether gall-stones are the result of an antecedent cholecystitis or by mechanical irritation are responsible for the development of a subsequent cholecystitis is not a question that can be answered at the present time. In special cases it can be shown that one or the other of these two mechanisms is presumably responsible for the troubles of the patient, but in general they can be discussed together. If, however, medical therapy is ever to supplant surgery in this field of medicine it will be necessary to recognize and correct disturbances in the biliary tract before the formation of calculi. There are various predisposing causes that must be considered in relation to the production of either cholecystitis or cholelithiasis. Particular emphasis is placed on the effects of (1) biliary stasis, (2) infection, (3) disturbances in pigment excretion, or (4) cholesterol metabolism, (5) obesity and (6) pregnancy. Biliary stasis with stagnation of the bile in the gall bladder is important. Such stasis presumably permits greater concentration of the bile and so favors deposition of insoluble matter. It is further assumed that stasis favors the development of both infection of the bile and inflammatory processes in the wall of the gall bladder. Infection may involve either the bile or the gall bladder, or both. Bacteriologic studies have found streptococci, which have been considered to result from focal infection arising primarily in the teeth, tonsils, or appendix. Cholecystitis is a frequent complication in typhoid, and a residual infection of the biliary tract is responsible for many typhoid carriers. This is a cause of disease of the biliary tract, which we hope is of diminishing importance. These two types of infection are usually thought to be blood borne, though whether the organism reaches the gall bladder through the bile, through the cystic artery or by lymphatic extension from the liver is a source of controversy. Hurst believes that the majority of cases of cholecystitis are due to infection with the colon bacillus and are the result of an ascending infection to the gall bladder from the duodenum.

Metabolic disturbances may affect the excretion of either bile pigment or cholesterol. Small, irregular, dark brown or almost black stones composed of pigment and calcium with only slight, if any, degree of accompanying cholecystitis are frequently found in patients with congenital hemolytic jaundice. In this condition it is recognized that there is a marked pleochromia of the bile as a result of the excessive excretion of bile pigment. Disturbances in cholesterol metabolism frequently result in the formation of gall-stones. The waxy, glistening gallstone composed of a radiating mass of cholesterol crystals is most charasteristic, but, according to McNee, only some 6% of gall-stones are of this type. 20% are combination stones in which cholesterol serves as a nucleus for the subsequent deposition of pigment and calcium; 64% are mixed stones built up of concentric layers of cholesterol, pigment and lime salts. It is frequently assumed that the pure cholesterol stone is deposited as the result of a primary metabolic disturbance which may be independent of any element of cholecystitis. The effect of infection in causing the deposition of pigment and calcium is evidenced in the mixed types of stones. Pickens, and others, have recently pointed out that gallstones, on the average, consist of 94% cholesterol with only some 3% of pigment and 1% of calcium present. Under these conditions the importance of cholesterol and of disturbances of cholesterol metabolism in the formation of calculi is obvious.

A tremendous amount of work has been done on diferent phases of cholesterol metabolism, but here also there is no final agreement as to the origin, function or fate of this material. It is probable that the cholesterol in the body is both endogenous and exogenous in origin. The relative importance of these two sources has not been finally determined, though most observers consider that the greater proportion of the cholesterol is absorbed from the food and is excreted in the bile. A smaller amount is excreted in the bowel. The presence of bile in the intestine favors the absorption of cholesterol but is not essential thereto. According to this view the liver has a regulating function and is active in maintaining the cholesterol content of the blood at a fairly constant level. In some types of liver disease, especially when biliary

obstruction is present, the cholesterol content of the blood is increased, while that in the bile is reduced. Normally, apart from the diurnal variations, it is difficult to affect the cholesterol level of the blood, though slight and transient increases may be produced by a meal rich in cholesterol, particularly if fats are fed in addition. There is considerable evidence that, with the prolonged use of foods rich in cholesterol, hypercholesteremia develops and is accompanied by an increased excretion of cholesterol in the bile. Independently of the cholesterol intake, diets rich in fats or any other measure that produces an increase in the fat content of the blood also produce hypercholesteremia. Diets low in cholesterol, especially if they are low in fats as well, lead to a reduction in the cholesterol content of the blood. If hypercholesteremia is present, such diets frequently produce a return to normal but do not reduce the cholesterol content of the blood below normal. Hypercholesteremia has been found in a large proportion of patients with chronic cholecystitis or cholelithiasis without biliary obstruction. The bile cholesterol is increased in some but not all cases. In these cases a diet low in choesterol and at times the use of repeated duodenal drainages frequently results in a return toward normal of the blood cholesterol, associated with an improvement in the clinical condition of the patient.

There is a definite sex diference in the incidence of cholecystitis and cholelithiasis, and various factors have been proposed to explain the greater frequency in females. Two of the most important of these are obesity and pregnancy. In obesity there seems to be a disturbance in cholesterol metabolism, but a definite relation between the cholesterol content of the blood and the degree of obesity has not been established. Rapid weight reduction or starvation with mobilization of fat apparently liberates considerable quantities of stored cholesterol and produces a resultant hypercholesteremia. Under these conditions it should be emphasized that while weight reduction is important in the obese patient it should be gradual, and care should be taken to avoid stasis during the period of reduction. Hypercholesteremia also occurs in pregnancy; apparently this is due in part to retention for the bile cholesterol is at first reduced. In the later months of pregnancy and post partum the retained cholesterol is eliminated in part in the bile. Bodily activity is apt to be reduced during pregnancy and constipation is usual. All these factors promote biliary stasis and so favor the formation of calculi and the development of biliary infection during pregnancy.

The fundamental requirement for satisfactory results in the treatment of gall bladder disease is, of course, a correct initial diagnosis. A careful and complete diagnostic work-up is essential, for there is no one method of diagnosis that is infallible. In the majority of patients, symptoms are usually indefinite. Typical colic is by no means always associated with stones. Physical examination is frequently of little assistance, except in acute conditions or in cases of jaundice. The limitations of cholecystographic study must be recognized, for a diseased gall bladder may visualize and empty normally even though stones are present. Conversely, there may be no visualization on repeated cholecystographic examination and still laparotomy may reveal an apparently normal gall bladder. Nonsurgical biliary tract drainage has been found a valuable supplementary method of diagnosis, provided the drainage is properly performed and the results are correctly interpreted, particularly in regard to the absence of concentrated bile or the presence of pathologic elements in the biliary sediment. A general plan of medical treatment may be considered under the heading of (1) prevention of biliary stasis, (2) prevention or treatment of inflammation of the gall bladder or bile ducts, (3) diet and (4) removal of calculi when once formed. So far, progress other than surgical in this last type of therapy has been nil and need not be considered further.

The value of attention to the general hygiene of the patient, of regular habits, moderate exercise, deep breathing, avoidance of constipation, freedom from mental strain and worry and the like has been amply demonstrated by experience. In the past this improvement has been ascribed largely to the relief of biliary stasis. In the light of present knowledge of the physiology of the biliary tract, it would seem now that the value of such measures is to be ascribed as much to the improvement in muscular tone and the state of the general health of the patient as to any specific action on the gall bladder. This remark, however, is not to be interpreted as in any way minimizing the importance of such general measures.

Removal of foci of infection, particularly as regards the teech and tonsils, is important as a means of preventing or treating infection in the biliary tract. Hurst, and others, have emphasized the importance of attacks of indigestion or acute gastritis in permitting ascending infec-

tion of the biliary tract, particularly with colon bacilli. Various spas have long been favored for the treatment of diseases of the liver and biliary tract. Apart from regulation of the hygiene of the patient and the use of diets, this type of therapy depends on the use of mineral waters. These contain saline cathartics in varying amounts, the active agent usually being magnesium sulphate, sodium sulphate, sodium phosphate or a mixture of these salts. It is now accepted that saline cathartics as well as the ever popular calomel have little action in stimulating the secretion of bile, but they prevent constipation, ensure regular action of the bowels, and favor emptying of the gall bladder. The use of duodenal drainage also facilitates the latter. This is a valuable diagnostic procedure, but questions of time and expense lessen its value as a routine therapeutic measure. Alkaline powders when given before meals frequently relieve reflex gastric symptoms. Sedatives such as phenobarbital or bromides give excellent results, especially in nervous or neurotic patients. The use of these drugs with antispasmodics or alkalis at times is especially effective. Cholagogues give symptomatic relief in some cases.

While the occurrence of a typical biliary colic followed by jaundice is diagnostic, it usually indicates the presence of gall-stones and the need for surgical rather than medical management of the patient. The early symptoms of cholecystitis, the "inaugural symptoms of cholelithiasis" of Moynihan, are not localized to the biliary tract. Much of the epigastric fullness and distress, the flatulence and nausea of which these patients complain is due to disturbances in the activity of the stomach, duodenum and bowels, produced partly as a result of secondary reflex disturbances and partly as a result of interference with normal digestion.

Von Noorden has called attention to the secretory disturbances of the stomach and intestinal tract which he attributes to catarrhal conditions. He states that gastric hypo-acidity may not produce any symptoms but nevertheless has an effect on the biliary tract, particularly in regard to the loss of protective action against external bacterial invasion. Hyperacidity is more frequently associated with pain and furthermore produces excessive stimulation of the bile flow. This can be prevented by regulation of the acidity. Von Noorden also calls attention to the frequent association of the "lazy colon" with gall bladder disease. The relationship of the lazy colon to gall bladder disease cannot be over emphasized, and the importance of the spastic sigmoid, on the other hand, should be particularly stressed, for it sometimes causes cramping pain which may be mistaken for biliary colic.

The value of frequent small meals and of a bland, non-irritating diet that is free from coarse fiber and leaves only a small residue is generally accepted as basic in the treatment of chronic cholecystitis and the associated gastro-intestinal disturbances. The various topics previously discussed in this paper, however, show that no single diet is applicable to the management of all patients. When the patient is obese, reduction in weight is imperative. In this case, fats should be eliminated from the diet and the intake of cereals and starches reduced to keep the total intake of food below the caloric requirements. A certain proportion of patients with disease of the biliary tract complain of intolerance to food. Some have been literally "afraid to eat" and are semi-starved and underweight in consequence. In such cases the bland diet is important. In addition, when the patient is underweight every effort should be made to increase the caloric intake. Frequent feedings, either four or five small meals daily or the use of intermediate nourishment between the usual three meals, a liberal intake of starches and cereals, and, if possible, the addition of cream, butter or olive oil to the diet is desirable to facilitate gain in weight.

In some instances this intolerance to food is due to reflex gastric disturbances with the development of the syndrome of hyperacidity, which is usually considered characteristic of peptic ulcer. In such cases a modified ulcer type of management with or without the use of alkalis is indicated. Many patients show a definite intolerance to fats. The importance of bile in the absorption of fats has long been known. This is partly due to its action in activating the pancreatic lipase, partly to the action of the bile salts in favoring emulsification and solution of the fats, and partly to the formation of addition compounds between the bile salts and the fatty acids, which are thereby absorbed directly into the portal blood stream. Von Muller long ago showed the great diminution in the obsorption of fat that occurs in the presence of complete biliary obstruction. Many patients with cholecystitis complain of discomfort following a fat meal, which is probably best explained by the effect of fats in stimulating the formation of cholecystokinin. This stimulates the gall bladder to contract and, in the presence of active inflammation or lack of coordination in

the reputed reciprocal action of the gall bladder and the sphincter of Oddi, may well cause pain. On the other hand, if there is no intolerance, cream, egg yolk, or olive oil are valuable additions to the diet, for in the presence of a functionally competent gall bladder they stimulate the formation of cholecystokinin and aid biliary drainage. The significance of hypercholesteremia in relation to the possible formation of gallstones has already been discussed. The routine determination of the cholesterol content of the blood is a valuable procedure in these patients. When this value is increased, foods rich in cholesterol, such as brain, eggs, butter, goose, duck, liver, sweetbreads or cream, should be excluded from the diet.

In conclusion, therefore, (1) if due attention is given to the physiologic disturbances responsible for the symptoms of which the patient complains and if physiologic principles are kept in mind during the treatment, improvement is not only possible but probable in the present medical management of diseases of the gall bladder and biliary tract. (2) In almost every instance, gall bladder disease is an end result either of disturbed metabolism or chronic infection with all its potentialities for damage. (3) It is essential that the mechanism of disturbed metabolism be thoroughly studied, a mechanism which involves many organs, more particularly the digestive tract, the liver, the pancreas and ductless glands. (4) The origin and evolution of gall bladder infection must be exhaustively investigated. The biliary tract, both before and after surgery, is a medical problem since the liver, the pancreas, the bowel, heart muscle or the joints cannot be surgically removed. Progress will only come when the medical profession as a whole realizes the prevalence and seriousness of this affection and institutes measures which control the individual, not only from the standpoint of individual needs, but as an equally important factor, the general dietetic and hygienic procedures which we know to be associated in the management of this condition.

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COMING MEDICAL MEETINGS.

Ninth Councilor District Medical Society, Harrison, December 7th.

Council of the Arkansas Medical Society, Hotel Marion, Little Rock, December 9th.

Seventh Councilor District Medical Society, Arkadelphia, January 18, 1938.

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American Medical Association, San Francisco, June 13-17, 1938.

For value received a physician obtains more from his medical dues than he obtains from his dues paid to non-medical organizations. The value of returns is so great and membership benefits so vital that an eligible physician cannot afford to not be a member.—California and Western Medicine.

CHOLECYSTOGRAPHY AS AN AID TO DIAGNOSIS*

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Cholecystography can now look back on twelve years of brilliant history. If any clinician has a lingering impression that the method is superfluous, impractical, or unreliable, the notion must have been derived from a limited and disappointing experience with the test in early days; at present such an idea has no justification. Although the method itself was unusually complete when it was introduced, those who applied it had much to learn, and their first attempts often failed. In unaccustomed hands at the beginning it was difficult, and it still is neither automatic nor altogether simple, but it has never been impractical.

Most persistent is the idea still entertained by a few clinicians that clinically significant disease of the gallbladder is attended with characteristic symptoms and signs, and that hence the dye test is merely an ultrascientific luxury. It will be granted that in many cases of severe cholecystic disease, especially those attended with typical biliary colic and jaundice, the clinical data are diagnostic. It will be granted also that cholecystography frequently fails to distinguish impairment of function produced by grave disease from that caused by minor, and perhaps transitory, affections. On the other hand, in many cases of biliary disease, whether severe or trivial, the symptoms and signs are by no means diagnostic and often are attributed to other affections, especially to chronic appendicitis and peptic ulcer. Only by cholecystography or by its combination with roentgenologic examination of the alimentary canal can a confident differential diagnosis be made. As for the concession that cholecystographic examination will not always determine the severity of a biliary affection and thus indicate the character of treatment advisable, it should scarcely be necessary to point out that selection of treatment should not rest on any single factor but on all pertinent data obtainable.

With respect to accuracy of diagnosis by this method there is no occasion for doubt. Today, the reliability of cholecystographic examination is closely comparable to that of roentgenologic examination of the alimentary canal, for both methods yield better than 90 per cent of correct diagnoses. But it is to be emphasized that this near approach to accuracy by cholecystography can be attained only with an appropriate and strictly executed technic and a reasonable amount of experience in interpretation, for it is not a rough and ready test that can be applied efficiently without scrupulous attention to details or without seasoned judgment.

In carrying out the oral method, which has almost completely superseded the intravenous method, many pertinent factors are involved and certain essential principles must be respected. The dye must be given in sufficient quantity, in palatable and readily absorbable form, in a manner that will not produce undue nausea or purgation, and under conditions that will not hamper its evacuation from the stomach and absorption from the bowel. No food should be taken by the patient except as instructed, and the bowel should be empty when the cholecystograms are made, but purgatives and other medicines that might affect the gallbladder or the absorption of the dye should be interdicted. To comply with these and other requirements entails a rather complex procedure, yet it is not difficult if an orderly routine is established and every feature is punctiliously observed.

At the clinic, for example, 4 gm. of sodium tetraiodophenolphthalein, freshly dissolved in 30 c. c. of distilled water, is dispensed to the patient. He is instructed to eat supper at 6:00 p. m., in full amount but without eggs, cream, butter, or other fats, and immediately afterward to take all the dye in a glassful of grapejuice. He is required to abstain from breakfast next morning although he is permitted to take water, black coffee, or tea, and is instructed to cleanse the towel with a warm saline enema until the water returns clear.

The roentgenographic technic is extremely painstaking, every precaution being taken to prevent movement, and the distance, voltage and time are accurately proportioned according to the thickness of the patient's body, which is determined by measurement. Three sets of cholecystograms, each comprising at least two films, are made at 8 and 10 a. m. and at 2 p. m., respectively. When the first set of films is developed they are scrutinized to see whether the centering and roentgenographic factors were suitable and whether the right upper quadrant is obscured by gas. In the latter event an effort is made to displace the gas by massage, or, if necessary, a hypodermic injection of pitressin is given to induce peristaltic activity.

* Read before the meeting of the Arkansas Medical Society, Little Rock, Arkansas, April 12-14, 1937.

At noon, between the second and third sets of cholecystograms, the patient includes with his midday meal a glassful of milk and cream in equal parts, the object of which is to induce partial emptying of the gallbladder.

To make reliable interpretations the examiner must realize that there is no standard normal shadow of the gallbladder with respect to general form, size, or density, and that all these qualities vary widely within normal limits. Hence, with certain obvious exceptions, judgment should be based on its best appearance rather than on its worst. However, there are three practically indispensable characteristics of a normal shadow: At one or another period it should be sufficiently dense to be visible without extreme effort, should be homogeneous without dense spots, rarefactions, or persistent gross marginal defects, and should show a change in size at the second or third period. The last is an especially important point, for if the shadow is of the same size throughout, it is likely that the opacity is produced by a diseased gallbladder, not by dye, and the patient should be re-examined without giving the medium. Petty marginal irregularities usually are meaningless, and I do not believe that delayed filling or delayed emptying of the gallbladder warrants a diagnosis of disease. To avoid prejudice all interpretations should be made without knowledge of the clinical facts.

Although a generally conservative attitude must be maintained in interpreting cholecystograms, almost implicit reliance can be placed on absence, faintness, or mottling of the shadow, provided any lapse in the technical routine can be excluded. Absence of any shadow of dye is reasonably conclusive evidence that the gallbladder is not performing its function, and disease of the biliary tract is the cause in from 95 to 98 per cent of cases. Faintness of the shadow is slightly less reliable as an index of disease, for necessarily the personal equation of the examiner enters into this interpretation. However, if he construes as faint only those shadows that are so delicate as to be scarcely discernible, the faint shadow is indicative of disease in more than 90 per cent of cases. When the shadow is mottled with transradiant or dense spots, the first thought, of course, is of gallstones. Such mottling is often most distinctly visible in the third set of cholecystograms, when the gallbladder is partly evacuated, for at this time minute concretions become evident. When the gallbladder is depicted by dye, failure to discover gallstones that are present is almost inexcusable. Shadows or shadow-defects caused by fecal material, calcified lymph nodes, renal or pancreatic calculi, calcified costal cartilages, or intestinal gas usually can be distinguished from the opaque or transradiant spots produced by gallstones. In perhaps half of all cases gallstones prevent, either by obstruction or otherwise, the production of any shadow of dye, and the gallstones themselves may or may not cast shadows, depending on the amount and distribution of lime salts in the calculi. On the whole, a definite cholecystographic diagnosis of gallstones can be made in about 70 per cent of cases, but in almost all the remaining cases cholecystic disease is evidenced by absence of a dye-shadow.

Benign tumors of the gallblader, which are mostly papillomas or adenomas, are depicted as transradiant spots in the dye-shadow, and until a few years ago I had supposed that these tumors could not be distinguished from light gallstones. On investigation, however, I found that under favorable circumstances this distinction could be made. Papillomas are manifested as clear, oval, or round, shadow defects, with a diameter usually of less than 0.5 cm. and rarely more than 1 cm. They may be single but more often are multiple, in which event they are widely discrete. An important characteristic is that they are seldom situated immediately in the fundus and are often remote from it. They preserve the same relative situation on all films and, although usually visible in all three sets of cholecystograms, they may be most readily visible in the third set of cholecystograms, when the gallbladder is contracted.

Adenomas are almost constantly single, likely to be somewhat larger than papillomas, and their favorite situation is immediately at the fundus or near it. They are likely to become larger than papillomas and may attain a diameter of 2 cm. Usually, the shadow defect is hemispherical. In typical cases, therefore, the defect representing an adenoma is semi-circular, and in most cases can be seen only in the final set of cholecystograms, when the gallbladder is contracted.

Cancer of the gallbladder has not as yet been diagnosed as such by cholecystography, for in most cases the growth arises at the cystic neck and is associated with gallstones, so that production of a dye-shadow is usually prevented. However, occasional demonstration and diagnosis of early cancer may ultimately be expected.

To sum up the general efficiency of cholecystographic diagnosis by competent examiners, it can be asserted confidently that 95 per cent of the diagnoses of cholecystic disease, with or without gallstones or tumors, will prove to be correct. For a time it was widely believed that the function of the gallbladder might be impaired by duodenal ulcer, diabetes, exophthalmic goiter, or certain other extrabiliary affections, and thus might lead to errors in diagnosis, but investigations by Good and me have shown that extrabiliary affections have little if any effect on gallbladder function when studied cholecystographically. In short, it seems safe to assume that virtually all of the few errors on the positive side are due to faults in technic or to lack of care in interpretation. Negative diagnoses are slightly less accurate than positive ones. A normal shadow of the gallbladder does not always prove that the viscus is normal, for in about 8 per cent of normal responses from patients ordinarily subjected to the test the gallbladder nevertheless is diseased.

All considerations fully warrant application of the test to every patient whose symptoms may arise from cholecystic disease. Even when the clinical manifestations are reasonably diagnostic, confirmation by cholecystographic examination is desirable, for no diagnosis can be too strongly fortified. Of course the test is most useful when symptoms and signs are so indecisive that the presence of biliary disease cannot be affirmed or excluded with confidence, and this applies to many, if not most, patients who have upper abdominal distress.

Finally, to renew an often repeated caution, a cholecystographic diagnosis of biliary disease should never be made the sole basis for surgical intervention. It is for the clinician to decide whether such disease is the probable cause of the patient's chief complaints, and whether these are severe enough to justify operation. The prime purpose of cholecystography is to serve the clinician, not to supplant him.

REFERENCE

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Application blanks are now available for space in the Scientific Exhibit at the San Francisco Session of the American Medical Association, June 13-17, 1938. The Committee on Scientific Exhibit requires that all applicants fill out the regular forms:

Application blanks may be obtained from the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

THE SURGICAL TREATMENT OF GALL BLADDER DISEASE*

A. F. HOGE, M. D., F. A. C. S.
Fort Smith

The significance of jaundice and the diagnosis of cholecystitis have been discussed by my colleague. This discussion has included the history, physical examination, clinical laboratory, and x-ray findings and their correlation. For the purpose of this paper it will be assumed that the patient has been referred, after careful and complete study, with the diagnosis of cholecystitis, acute or chronic, with or without stones.

In considering the type of treatment, we should consider the natural course of the disease; the potential dangers or complications, the other conditions present, and the general condition of the patient; then, after a careful evaluation of all the factors present in a given case, decide whether medical or surgical treatment offers the patient the greater good.

With reference to the natural course of the disease, we have all seen patients who have had an attack of cholecystitis which has subsided spontaneously, and apparently completely after a period of medical management which has included anatomic and physiological rest and a clearing up of associated foci of infection. Such cases are those due to infection and in which stones have not developed. They are decidedly in the minority. The usual thing is for the acute attack to subside, leaving a chronic infection or cholecystitis and the latter will from time to time flare up in an acute exacerbation. Generally, stones will sooner or later occur in this type of gall bladder.

It is my present opinion that the patient with the first attack of cholecystitis without stones should have the benefit of medical management for a reasonable period of time in an effort to obtain complete subsidence of the disease. However, this period of medical management should not be too prolonged. If complete subsidence does not occur, surgical treatment should be instituted **early** because of the likelihood of complications or sequelae.

There is evidently a difference in meaning among some writers who speak of "early operation" in cholecystitis. Bashein (1) for instance classifies cases as **early** or **late,** according to the number of previous attacks, and not the stage, of the present attack. He says, "In our series

* Read before the Sixty-Second Annual Session of the Arkansas Medical Society, Little Rock, April 12, 1937.

of cases we made an arbitrary classification; those with one or two attacks we called early cases, whereas those with more than two attacks, many of them having had numerous attacks extending over a period of years, we called late cases." Others who speak of and urge early operation, refer to the immediate attack, and by early operation mean within a few hours or days after the onset of the acute attack. Later this will be discussed more fully.

Returning to a consideration of the natural course of the disease, we find that with recurring exacerbations of cholecystitis, certain complications and sequelae may make their appearance. The sequelae may include changes in the psychology of the patient, migraine headaches, liver dysfunction or hepatitis, disturbance in function of colon or spastic colon, myocardial changes, joint involvement or arthritis, kidney damage, pancreatitis and diabetes. Also, there frequently ensues or there may be found associated with cholecystitis, a degree of anemia. This may be due to disturbance in enzyme production, and it is an interesting speculation as to whether or not this sequence of events may lead to pernicious anemia. Rehfuss (2) states that there is a definite change in the psychology of the individual who has a chronic gall bladder infection. "The individual with an infected gall bladder is inclined to be irritable, depressed, and develop various inferiority complexes. He is easily exhausted and subject to insomnia." Rehfuss (2) also asserts that four out of five cases having a chronically inflamed gall bladder are associated with defective liver function while two out of three cases have a defective colon function. It has been my happy experience to alleviate the symptoms, or apparently to cure several patients who had been under prolonged treatment for so called spastic colitis, by removing a chronically infected gall bladder.

Disturbance in digestion, flatulence, a feeling of fullness and distress, food selection, etc. have been noted by all clinicians. Likewise, most clinicians have noted the cardiac arrhythmias, myocardial changes, pseudo-anginal attacks that are associated with chronic gall bladder disease. Myocardial changes were noted by Rhefuss (2) in 20% of the cases studied. It has been gratifying and surprising to me to see the marked improvement in the heart condition in some of these patients following surgical attack on a diseased gall bladder. Rhefuss (2) points out that "Joint disturbances are exceedingly common in the infected gall blader individual, about one out of every two complain ob join disturbances, carying all the way from myalgia to obvious periarticular involvement." The damage to kidney function has been discused by Helwig. I have noted in several patients who have deferred accepting surgical treatment following the onset of cholecystitis with jaundice, that, in the beginning of the attack the kidney function as determined by urinalysis was normal. Within a few days after the onset and continuation of the jaundice, the urine in these cases showed, in addition to bile, increasing amounts of albumin, blood cells, and granular casts.

The association of diabetes with disease of the biliary tract has long been noted. Joslin has said that if one could choose the type of diabetes he must have, the type associated with gall bladder disease is to be preferred. This relationship has also been commented upon by Brooks, Clinton, and Ashley (4).

In the majority of cases of cholecystitis occurring at St. Edward's Mercy Hospital there has been observed a rather constant anemia.

With each succeeding attack there is an aggravation of the disease locally, and there is greater likelihood of the development of complications which may render the surgical treatment, which has become imperatively necessary, more technically difficult. These complications would include the development of suppurative cholangitis, empyema of the gall bladder, perforation of the viscus, the passing of a stone into and obstruction of the common duct, and the establishment of fistulae between the perforating gall bladder and the duodenum or the colon. Also, following prolonged gall bladder disease with history of repeated attacks, one is apt to find either a thick-walled, contracted, inaccessible gall bladder, or one that is deeply embedded in adhesions and accessible only with careful and difficult dissection.

Early operation, using the term "early" in the sense that it is used by Bashein, is indicated in practically all cases of cholecystitis. In his early cases; i. e., "Those having had only one or two attacks, the mortality was only 3%, whereas the mortality for those with more than two attacks, many of them having had numerous attacks extending over a period of years" was 8.7%. The fact that many of these patients are appreciably older, that many of them have developed heart complications, impaired liver

and kidney function, would seem to be an adequate explanation for the higher death rate in late cases. It is my opinion that the danger of operation is far less than the danger of the disease. The risk of operation is, of course, incurred at the time of operation, whereas the risk due to the disease, though greater, is in many instances deferred for an indefinite period.

Time does not permit of my going into a detailed discussion of the pros and cons relative to immediate operation either during the presence, or shortly after the onset of the acute attack. One finds in recent literature many papers quoting statistics supporting either position, that is, the policy of immediate surgical intervention, or one of waiting, but very watchful waiting until the immediate attack subsides. It is my belief that if the proponents of immediate surgical intervention gain a large following among the surgeons of America, gall bladder surgery, will suffer unnecessary disrepute. It is my observation that the majority of cases will subside with appropriate care, and the patients can then be put in better condition for operation. The argument that following subsidence of the acute attack "the patient may refuse operation to his detriment" is not, in my opinion, a valid one. It seems to me that the patient shauld have the facts put before him and that it is then his privilege to decide whether or not he chooses operation. However, during the acute attack the physician should be constantly on the alert to detect symptoms and signs of the more urgent complications mentioned, e. g. empyema, suppurative cholanigitis, perforation, obstruction of the common duct, etc. Should evidence of any of these complications develop, immediate surgical intervention becomes mandatory.

Cholecystectomy is acclaimed by all surgeons as the operation of choice because of the fact that the end results following this operation are far superior to those following cholecystostomy. Cholecystectomy will be safely possible in a larger percentage of the cases if the operation is performed during the interval between attacks. However, cholecystostomy is not to be disdained and may be the only operation that can be safely done. In the bad risk case, for example, the patient with empyems of the gall bladder or a common duct obstruction, it may be life saving and should be the operation of choice. When cholecystostomy alone is done, about 50% of the patients will have recurrence of trouble and secondary removal will be necessary. However, there is no argument as to the advantage of doing two or more operations and having a live and well patient at the end, over doing one complete and perfect operation with failure.

Examination of the ducts should be undertaken whenever possible, but I do not believe that routine opening and exploration of the ducts should be done. The latter procedure should be used only when the history and findings indicate the possibility or likelihood of common duct stones.

The discussion of preoperative preparation, technique of operation, and postoperative management, would require more time than is usually allotted.

In closing, I should like to emphasize the fact that patients with gall bladder disease should not be allowed to go on and on with repeated attacks, relieved by morphine, gastric lavage, etc., until, finally, they reach the stage where operation is the only way out. The family doctor should realize that these patients can be relieved of the greater risk of delay by being referred for operation early.

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A "Golfers Special" to the San Francisco meeting of the A. M. A. is being organized by the American Medical Golfing Association. Physicians who like golf mixed with their travel will find five games arranged on the trip out to the coast for the A. M. A. meeting of June 13, 14, 15, 16 and 17, 1938, and three games on the return trip thru the Northwest. The first game will be played in New Orleans, reached by the Steamship S. S. Dixie, from New York (or via a rail itinerary) on Tuesday, June 7, 1938. Other stops include Houston, Galveston and San Antonio, Texas; Los Angeles and Del Monte, California; and finally San Francisco where the big A. M. G. A. tourney will be held on Monday, June 13, 1938.

The return trip includes Portland, Oregon; Seattle, Washington; Vancouver, B. C.; Lake Louise and Banff, and finally St. Paul and Chicago.

Non-golfers as well as golfers, and their ladies, are WELCOME and will find the A. M. G. A. Special a glorious experience.

For full particulars write Dr. Walt P. Conaway, 1723 Pacific Avenue, Atlantic City, N. J., the President of the A. M. G. A.; or Bill Burns, Executive Secretary, 2020 Olds Tower, Lansing, Michigan.

PRESIDENT'S PAGE

Christmas Greetings and wishes for a Happy New Year to the Members of the Arkansas Medical Society, a body of men united for a common cause based on the creed of the One whose birthday is soon to be celebrated. "He went about doing good."

In becoming acquainted with the constantly advancing scientific knowledge and in learning to apply this knowledge in the maintainance of health and care of the sick has been the tie that binds us to our many friends and associates. There is no question but that the individual physician exercises influence on the thoughts, lives and actions of many lay associates as probably no other professional man does. Then the ideals and aims of the County, the State and the American Medical Association should head every physician's resolutions for the New Year.

O. J. T. JOHNSTON, M. D.

THE JOURNAL
OF THE
ARKANSAS MEDICAL SOCIETY

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W. R. BROOKSHER, M. D., Editor
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

THE JOURNAL WISHES YOU A MERRY CHRISTMAS

MEMBERSHIP

The Journal reiterates its firm opinion that present events and activities make it urgently necessary that the individual physician unite with his fellow practitioners in cooperative, organized effort devoted to their mutual welfare —the organized medical profession. It is solely due to the united force of medical organization that the chaos into which socializing agencies would engulf the profession has been avoided. Without its strong influence the average practitioner would now be but a petty governmental employee, a political hireling, submerged in a plethora of forms and regulations, devoid of ambition for professional improvement, alert only to be done with his quota of patients for the day. In organized medicine and in organized medicine alone lies our future protection against the evils which self-seeking reformers and uplifters would thrust upon us. Only as active, working members of our county, state and national medical societies can we exert strength in our behalf.

The 1937 roster of the Arkansas Medical Society contained 1063 names on November 1st. This is a gain of but one member over our 1936 strength. There were delinquent in the payment of assessment at this time 41 physicians. There are a goodly number of eligible physicians within the state who should support the activities and aims of organized medicine. It really should be unnecessary to stress the obligation of every doctor to be a member his county and state society and a fellow of the American Medical Association. If one cannot see the value of medical organization in the past few years, there is no hope that the physician who still remains an outsider can be induced to lend his help to the common cause.

The time now approaches for the payment of the 1938 assessment of membership. We hope that this will be promptly paid by a larger percentage of our membership than ever before. Each individual physician can relieve his county society secretary of an onerous burden by voluntarily sending his check now. This will be appreciated cooperation indeed.

ORGANIZED MEDICINE IS NOT IN REVOLT

AN EDITORIAL

Recently newspapers throughout the country have commented at considerable length upon a series of proposals and principles emanating from a self-styled committee of physicians some 430 in number, none of whom is a member of the Arkansas Medical Society. It is possibly significant to note that a large number of these "leaders of the profession" are but remotely in touch with the private practice of medicine. The adoption of these principles and proposals has been urged upon state and county societies of the United States, a suggestion apparently not well received.

The fact that about one hundred of these 430 signers have subsequently advised the American Medical Association that their signatures were obtained under a misunderstanding and that they intend to have their approval withdrawn will, necessarily, not receive the full publicity which was accorded the original announcement.

The appearance of this petition in the public press has been heralded as denoting a "revolt" or revolution within the ranks of organized medicine, that the individual members have at last decided to do away with any of a number of alleged defects in our central organization, and that it indicates conversion to the benefits of socialized or state medicine by the rank and file of the physicians of America. This is most emphatically not the case. The individual practitioner opposes with all vigor every effort toward this end; organized medicine still relentlessly combats the reformers who would destroy our present individualistic system of medical practice, admittedly without peer in the world. The Board of Trustees of the American Medical Association reviews the circumstances and reaffirms the position of organized medicine in the statement which follows:

"Following the publication of the report of the American Foundation Studies in Government, a small group of physicians, assembled in New York, developed certain principles and proposals which have since been circulated by a self-appointed Committee of Physicians among the medical profession of the United States, with a view to obtaining signatures in their support. During a period of approximately six months, some 430 medical men have apparently permitted the use of their names. Early in November the self-appointed group of physicians released to the press for Sunday, November 7, a statement of principles and proposals to which the names of the 430 signers were affixed. The newspapers generally heralded this action as a revolt against the American Medical Association, in a great majority of the cases indicating that there was a revolt in behalf of 'state medicine'. The publication of this manifesto and the attached signatures has been heralded with glee by many of those who have been opposing the American Medical Association in behalf of cooperative practice, sickness insurance, and various fundamental changes in the nature of the practice of medicine. Within the last week another series of proposals has come from another self-appointed group requesting signatures of physicians. This series of proposals includes the suggestion for enabling legislation for sickness insurance.

"The American Medical Association is an organization of physicians along strictly democratic lines. Representatives of county medical societies send delegates to state medical societies and these, in turn, send their delegates to the House of Delegates of the American Medical Association. It is possible for any physician, through his delegate, to obtain consideration of any proposal which he may wish to bring to the attention of the House of Delegates. At the Atlantic City session the delegates from New York State presented these principles and proposals, slightly modified, as an action of the House of Delegates of the New York State Medical Society. They were carried before a reference committee and, in several sessions of that reference committee, considerable numbers of physicians presented arguments for and against their adoption. The House of Delegates, however, after thorough consideration of the report of the reference committee, and with full cognizance of the method of development of these principles and proposals, and of the considerations which were involved in their passage by the House of Delegates of the New York State Medical Society, did not accept them. The House of Delegates did, however, point out the willingness of the medical profession to do its utmost today, as in the past, to provide adequate medical service for all those unable to pay either in whole or in part.

"Why, then, any necessity for the circulation of petitions presenting proposals for fundamental changes in the nature of development, distribution and payment for medical service? Is there a well designed plan to impress the executive and legislative branches of our government with the view that the American medical profession is disorganized, distrustful of its leaders, undemocratic in its action and opposed to the best interests of the people? Who may profit from such evidence of disorganization? Is there any evidence that the self-appointed Committee of Physicians and the 430 physicians who have affixed their names to these principles and proposals are any better able to represent the opinion of the American medical profession than the democratically chosen House of Delegates of the American Medical Association—one of the most truly representative bodies existing in any type of organized activity in this country today?

"The House of Delegates has given its mandate to the Board of Trustees, to the officers and to the employees of the Association. That mandate opposes the principles and proposals emanating from the Committee of Physicians, and equally the new proposals. If the House of Delegates sees fit to depart from the principles now established, it will be the duty of the Board of Trustees, the officers and the employees of the American Medical Association to promote such new principles as the House of Delegates may establish. Until, however, the regularly chosen representatives of the 106,000 physicians who constitute the membership of the American Medical Association (now the largest membership in its history) determine, after due consideration, that some fundamental change or revolution in the nature of development, distribution and payment for medical service in the United States is necessary, physicians will do well to abide by the principles which the House of Delegates has established. They will at the same time deprecate any attempts inclined to lead the executive and legislative branches of our government, as well as the people of the United States, into the belief that the American medical profession is disorganized.

"Members of the medical profession, locally and in the various states, are ready and willing to consider, with other agencies, ways and means of meeting the problems of providing medical service and diagnostic laboratory facilities for all requiring such services and not able to meet the full cost thereof. The American Medical Association has reaffirmed its willingness on receipt of direct request to cooperate with any governmental or other qualified agency and to make available the information, observations and results of investigation, together with any facilities of the Association. Thus far, no call has come from any governmental or other qualified agency, for the cooperation of the American Medical Association in studying the need of all or of any groups of the people for medical service, to determine to what extent any considerable proportion of our public are actually suffering from lack of medical care. The offer still stands as evidence of the willingness of the American Medical Association to aid in finding a solution to any or all of the problems in the field of medical care that now prevail."

The real danger in deviations from orderly, democratic procedure which accompanies digressions such as this from a "committee" lies in the opportunity which is afforded self-seeking individuals and groups to take the opportunity to propagandize their particular schemes, alleged to offer a cure for the evils which beset the world, be they social, economic, medical or what.

Organized medicine and its followers but need to keep up the good fight, providing the public with the best possible medical service, cooperating with one another in furtherance of the lofty aims and ideals of their profession, and to constantly strive in their heritage and right: committees and self-appointed groups who would take advantage of the profession will in but due course pass across the horizon.

THERE IS NO "DIVISION" IN ORGANIZED MEDICINE.

EDITORIAL

SICKNESS INSURANCE IN WASHINGTON

During November there was inaugurated in Washington, D. C., a group medical program for the employees of the Federal Home Loan Bank Board but also available to other Federal government personnel. We are informed that the preliminary organization expense for this venture was provided by the governmental agency. This plan provides medical and hospital care for the employees and their families with certain restrictions at a cost of from $2 to $3 a month. Members of the group who do not wish to consult the salaried physicians of the association must make arrangements with a private physician at their own expense. The usual humanitarian aims are voiced: to encourage prevention of illness by making prompt medical care available at all times and to reduce its cost. If this plan proves popular physicians may well expect its extension to other departments of our rapidly-expanding governmental bureaus. It is conceivably possible that the facilities of the Veterans Administration may be employed. It becomes incumbent upon the medical profession to carefully observe the operation of this scheme, to determine and to point out the weaknesses which invariably accompany these plans for medical care.

SULFANILAMIDE

While it is doubtless too late to issue further warning on the incautious administration of this drug, particularly of the employment of untried and unproven mixtures employing this potent agent, it does not seem amiss to call attention to the fact that practitioners have available certain sources of information, reference to which may well have avoided the tragic results which attended the use of the toxic elixir during October.

The Council on Pharmacy and Chemistry of the American Medical Association yearly issues a volume, "New and Nonofficial Remedies," in which various new drugs are described. Preparations listed as "accepted" by the Council have been carefully examined, tested and subjected to clinical trial sufficient to warrant the recommendation that their use will be free of danger to the patient. The use, therefore, of drugs which have not received a favorable report from the Council is not only extremely dangerous, but entirely unnecessary. It is the function of the Council to protect the physician from the dangers of trial within his own practice of these newer drugs.

The work of the Council has received the hearty cooperation of the leaders in the pharmaceutical field. It is to be deplored that other manufacturers fail to recognize the importance of the work of the Council and by "high-pressure" methods attempt to introduce their products to the exclusion of those firms who are making an honest effort to comply with all the regulations which the Council seeks to enforce.

Scientific medicine does not deny the newer methods of treatment; it does insist that such therapy shall be based upon a sound basis. The physician can best serve his patients by a rigid adherence to those standardized and accepted preparations which bear the approval of the Council.

EDITORIAL COMMENT

PROFESSIONAL CARDS

For the first time in several years the four pages allotted by The Journal as a Physician's Directory, consisting of professional cards, is entirely filled. This cooperation by members of the Society is appreciated and represents a definite contribution from these individual practitioners toward the costs of publication of The Journal. A number of these cards have been constantly with The Journal for many years, the following having been present in the issues of 1921: Robert Caldwell, Little Rock; D. W. Goldstein, Fort Smith; Dewell Gann, Jr., Little Rock; Chas. S. Holt, Fort Smith; W. T. Lowe, Pine Bluff; John G Watkins, Little Rock; Cooper Clinic, Fort Smith; Pat Murphey, Little Rock, and H. Fay H. Jones, Little Rock; The Journal is glad to acknowledge the constant support of these old friends, as well as that of those whose participation is more recent. Additional space can be made available to accommodate the cards of other members who desire to help in this manner.

ANOTHER EDITION OF THE AMERICAN MEDICAL DIRECTORY

The new edition of the American Medical Directory is now being compiled. A return card has been mailed to all physicians in order to insure an accurate listing of names and addresses.

There is no charge made for publishing the data in this book, nor are the physicians obligated in any way. You are requested to fill out and return immediately the card which is addressed and stamped for return.

PROCEEDINGS OF SOCIETIES

The Pulaski County Medical Society was addressed October 18th by Wilfred Parsons and Joseph Roe on "Schuller-Christian Disease."

The Fourth Councilor District Medical Society met at McGehee October 18th for the following program: "Purulent Pericarditis," Geo. V. Lewis, Little Rock, and "Some New Aspects in the Management of Toxemias of Pregnancy," John K. Walker, Pine Bluff. Drs. E. E. Barlow, Virgil Payne and S. W. Douglas, were appointed as a committee to study the following questionnairre: (1) Shall we endorse the method of medical practice to the clients of the Resettlement Administration as outlined in the October issue of The Journal of the Arkansas Medical Society? (2) What is the attitude of this society toward the venereal disease control movement and what fee shall we charge for administration of government furnished medicine?; (3) What charge for sending blood for Wassermann test?; (4) How shall we determine indigent patients?; (5) What attitude shall we take toward the tubercular clinic movement: Would it be ethical for one member of this society to assist in giving tests and examining without the other members in the same community being present?; (6) Is it ethical or prudent for a member to visit the school and examine children to ascertain defectives?; (7) If it is not desirable to do this, how should this commendable work be done?; and (8), Is it legal for a physician of a county medical society to authorize a nurse to vaccinate against smallpox, typhoid and diphtheria?

Reported by H. T. Smith.

The Mississippi County Medical Society was addressed November 2nd by M. B. Hendricks, "The Dangers of Acute Appendicitis"; I. G. Duncan, "Foreign Bodies in the Bladder," and Kinsey Buck, "Infant Feeding," all speakers of Memphis.

F. D. Smith, Secretary.

The following program was presented before the Pulaski County Medical Society November 22nd: "Pericarditis," Geo. V. Lewis, and "The Relationship Between the Arkansas Medical Society and the Rural Resettlement Administration," S. B. Hinkle.

E. H. White, Secretary.

The Prairie County Medical Society met at DeValls Bluff October 28th electing the following officers for 1938: President, J. R. Lynn, Hazen; President-elect, W. H. Crockett, Biscoe; Vice-president, J. G. Wilson, Ulm; Secretary-treasurer, J. C. Gilliam, and Delegate, J. R. Lynn. The society accepted the Resettlement Administration agreement and selected the following as executive officers: W. H. Crockett, Biscoe, Edward Adams, DeValls Bluff, and W. J. B. Williams, Des Arc. The following were appointed as committee to arrange for the 1938 meeting of the Third Councilor District Medical Society in Hazen: J. R. Lynn, T. G. Porter, J. G. Wilson, W. J. B. Williams and Edward Adams.

J. C. Gilliam, Secretary.

The Benton County Medical Society met in dinner session at Bentonville November 11th for an address by E. H. Skinner, Kansas City, "Single Dose, Destructive Radium Therapy for Early Superficial and Orifacial Cancers."

Geo. M. Love, Secretary.

The Crawford County Medical Society was addressed October 26th by D. W. Goldstein, Fort Smith, on "Pitfalls in the Treatment of Syphilis."

The Craighead-Poinsett Council Medical Society met in banquet session at Jonesboro November 4th with J. S. Speed, Memphis, as speaker, discussing "Infantile Paralysis."

The Union County Medical Society was addressed November 2nd by R. M. Balyeat, Oklahoma City; Alan Cazort and M. J. Kilbury, Little Rock.

The Ouachita County Medical Society met in regular monthly session, November 4th, at the home of Dr. and Mrs. B. V. Powell in Camden. A joint dinner was given for the doctors and their wives. Hosts and hostesses were Doctor and Mrs. B. V. Powell, Doctor and Mrs. J. B. Jameson and Doctor and Mrs. Sam Thompson. The following program was presented: "European Hospitals," Dr. H. Fay H. Jones, "Non-Union," Dr. Joe Shuffield, both speakers of Litttle Rock.

R. B. Robins, Secretary.

The Sebastain County Medical Society was addressed November 9th by Fred H. Krock, "Suction Pressure in the Home for Peripheral Vascular Disease."

L. M. Henry, Secretary.

The annual President's Night Dinner of the Pulaski County Medical Society honoring O. J. T. Johnston, Batesville, President, Arkansas Medical Society, was held at the Concordia Club, Little Rock, November 8th. The following past-presidents of the Society were honor guests: E. E. Barlow, Robert Caldwell, Geo. B. Fletcher, L. J. Kosminsky, J. M. Lemons, F. O. Mahony, M. E. McCaskill, D. A. Rhinehart and W. T. Wootton. J. H. Musser, New Orleans, addressed the meeting on "Some Observations on Coronary Disease."

The Jefferson County Medical Society was addressed November 5th by Gilbert J. Levy, Memphis, on "Infantile Paralysis."

The Washington County Medical Society was addressed November 2nd by C. M. Stroud, Saint Louis, "Present Status of Allergy" (with motion pictures).

Fount Richardson, Secretary.

At the meeting held October 14th in Jonesboro the following were elected officers of the First Councilor District Medical Society: W. M. Majors, Paragould, President; W. W. Hatcher, Imboden, Vice-president, and E. J. Stroud, Jonesboro, Secretary-treasurer. The Society will hold its 1938 spring session at Paragould.

E. J. Stroud, Secretary.

The Greene County Medical Society met in Paragould November 18th for the following program: "Deep X-ray Therapy in the Treatment of Malignancies of the Cervix and Breast," R. H. Willett, Jonesboro, and "The Significance of the Tuberculin Test," W. D. English, Cardwell, Missouri.

W. M. Majors, Secretary.

Fount Richardson, Fayetteville, addressed the November meeting of the Crawford County Medical Society on European medical practices.

RESOLUTION

WHEREAS, The Board and Medical Staff of the State Hospital deeply deplores the passing away of Dr. Joseph E. Roe, the able and efficient Secretary of the State Hospital Board, and

WHEREAS, The State Hospital has lost an untiring and indefatigable worker in the cause of suffering humanity, whose every effort has been directed toward the betterment of conditions at this institution, and

WHEREAS, his life, devoted to the sick and afflicted, his genial smile and engaging personality, all exemplified his noble, kind and true character,

THEREFORE, BE IT RESOLVED, that The Board and Medical Staff of the State Hospital tender to each of his stricken loved ones our heartfelt sympathy, and join in a prayer that a kind Heavenly Father may comfort and care for them in this sad hour.

BE IT FURTHER RESOLVED, that a copy of this resolution be furnished the family, and also the Journal of the Arkansas Medical Society.

MRS. FRANK H. DODGE,
Chairman, State Hospital Board

E. D. FLETCHER,

R. E. ROWLAND,

C. ARKEBAUER,

J. C. DAVIS,
Resolutions Committee of Medical Staff of the State Hospital

Two vocational pamphlets, "Nursing and How to Prepare For It" and "Nursing—A Profession for the College Graduate" are available to physicians who, in addition to their many other responsibilities, must often act as vocational advisors and confidants to their young patients.

These two pamphlets, which slip easily into any inside coat pocket, suggest answers to such questions as "Will I make a good nurse?"; "Is there a future in nursing for me?"; "What nursing schools shall I enter?". They outline the general admission requirements of nursing schools, provide criteria for choosing a nursing school, and discuss briefly the opportunities within the nursing profession.

The pamphlets have been prepared by the Nursing Information Bureau of the American Nurses' Association, which cooperates closely with the National League of Nursing Education and the National Organization for Public Health Nursing. Physicians who wish to have copies of them either for reference of to give to some of their interested young patients, may secure them, free of charge, from the Secretary, Arkansas State Nurses Ass'n., 400 N. 15th St., Fort Smith, Ark.

PERSONALS AND NEWS ITEMS

L. M. Smith has been elected president of the Russellville Chamber of Commerce.

BORN—A daughter, to Dr. and Mrs. F. W. Regnier, Prescott, on October 3rd.

Ralph Weddington, Fort Smith, spent an October vacation in Missouri.

A. W. Keith has been elected a director of the Stamps Commercial Club.

H. Fay H. Jones, Little Rock, attended the Southwestern Branch of the American Urological Association at Tulsa, October 14-16th, discussing the subjects, "Ureterospasm versus Ureterostricture" and "Empyema of the Ureter."

The Arkansas State Nurses Association was addressed in Little Rock by Paul Mahoney, Paul L. Day, Robert Milliken and W. Myers Smith.

"Physical Therapy of Chronic Atrophic Arthritis" by Euclid M. Smith, and "Chronic Arthritis of the Spine: Its Relation to Rheumatoid Disorders" by M. F. Lautman, both of Hot Springs National Park, appear in the October issue of Archives of Physical Therapy, X-ray and Radium.

Among those in attendance at the international Medical Assembly in Saint Louis during October were: Earle Hunt, Clarksville; C. T. Chamberlain, T. P. Foltz, F. H. Krock and Ralph Weddington, Fort Smith, and Alan Cazort, H. W. Hundling and M. J. Kilbury, Little Rock.

W. G. Hodges, Malvern, recently spent ten days at the Mayo Clinic, Rochester.

The State Fox Hunters Association was addressed at Sheridan October 27th by Joe Shuffield, Little Rock.

B. V. Powell has been elected surgeon of the Camden post, Veterans of Foreign Wars.

W. B. Grayson, Little Rock, gave five lectures before the class in public health, Vanderbilt University School of Medicine on November 9-12th. Dr. Grayson is a visiting professor on the faculty.

Howell Brewer, Hot Springs National Park, addressed the Armistice Day celebration of the Clarksville American Legion post.

O. J. T. Johnston, Batesville, and J. D. Riley, State Sanatorium, have been appointed as first and second vice-chairmen, respectively, for the 1937 Christmas Seal sale. The following have been selected on the speakers bureau for the sale in Little Rock; D. T. Hyatt, O. C. Melson, S. C. Fulmer and R. E. McLochlin.

Among those present for the Clinical Congress of the American College of Surgeons in Chicago during October were: A. F. Hoge, R. T. Smith, Fort Smith, and H. Fay H. Jones, Little Rock. Randolph Smith, Little Rock, was elected to fellowship at this convocation.

R. B. Robins, Camden, addressed the Tri-State Medical Society at Shreveport October 27th on "The Use of Sulfanilamide in General Infections and Its Untoward Effects."

Vernon Newman addressed the Little Rock branch, American Association of University Women, October 10th on the crippled childrens' program in Arkansas.

W. B. Grayson addressed the Arkansas Cosmetologists Association October 25th.

"Internal Hydrocephalus Following Repeated Intra-Ventricular Hemorrhages" by F. J. Scully, Hot Springs National Park, appeared in the October Annals of Internal Medicine.

P. L. Hathcock, Fayetteville, has been elected a trustee of the Central Methodist Church.

Frank Vinsonhaler, Little Rock, addressed the Scottish Rite reunion in Fort Smith October 27th.

K. K. Kimberlin and O. A. Jamison have been elected stewards of the Tuckerman Methodist Church.

R. D. Dickins has moved into his new office building at Monticello.

R. B. Robins addressed the nurses of district seven at Camden November 10th.

E. J. Stroud addressed the Jonesboro Kiwanis Club November 3rd on "Sulfanilamide."

S. C. Fulmer, Little Rock, presented two papers before the annual meeting of the Scott and White Clinic, Temple, Texas, during November, "High Blood Pressure" and "Treatment of Heart Disease."

Clyde McNeil has been elected a director of the Rogers Chamber of Commerce.

Program participants in the recent Southern Medical Association meeting were: J. K. Donaldson, Little Rock, "The Relationship of Medical Schools to the Problems of Medical Ethics and Medical Economics"; W. B. Grayson and A. M. Washburn, Little Rock, "Tuberculosis Problems in Arkansas"; Ewell I. Thompson, Little Rock, "Diseases Misdiagnosed as Early Syphilis"; J. K. Donaldson and H. S. Thatcher, Little Rock, "Experimental and Clinical Studies Regarding Non-inversion of Appendiceal Stump"; Fred H. Krock, Fort Smith, "A Simplified Apparatus for Suction Pressure Therapy in Vascular Diseases of the Extremities"; Sam Phillips, Little Rock, "Rupture of the Adrenal in the New Born"; G. W. Reagan, Little Rock, "Wilms' Tumor of the Kidney"; H. King Wade, Hot Springs National Park, "Tumor of the Testicle"; John Agar, Little Rock, "Diagnostic Bronchoscopy: Its Value and Application"; D. A. Rhinehart, Little Rock, "The Significance of Calcification Within the Lung", and T. E. Fuller, Texarkana, "Unusual Complications of Radical Antrum Operation." The following opened discussions: H. Fay H. Jones, S. C. Fulmer, P. L. Mahoney, H. S. Thatcher, and F. W. Carruthers. Val Parmley presented a scientific exhibit, "The Surgery of Trauma."

Acting in an official capacity during the recent meeting of the Southern Medical Association in New Orleans were: H. S. Thatcher, Little Rock, Councilor; H. E. Murry, Texarkana, Chairman, Section on Gastroenterology; D. A. Rhinehart, Little Rock, Chairman, Section on Radiology; H. S. Thatcher, Secretary, Section on Medical Education, and W. B. Grayson, Little Rock, Vice-chairman, Section on Public Health.

MARRIED—On November 3rd, at Little Rock, Dr. Mahlon D. Prickett, Malvern, and Miss Terrell Hart Farish, Little Rock.

Recent elections in Kiwanis Clubs are as follows: El Dorado, Vice-president, W. S. Riley, and Director, D. E. White; Fort Smith, Director, R. T. Smith.

MARRIED—On October 16th, Dr. W. J. B. Williams and Miss Frances Modene Uland, of Des Arc.

Alan A. Gilbert, Fayetteville, has been appointed Grand Medicin of the Arkansas Forty and Eight.

A. C. Thiolliere, North Little Rock, who went to France with the American Legion Good Will Tour is remaining for a visit in his native country.

R. L. Smith has been selected as sponsor of the Pre-Medic Club at Arkansas Tech.

W. Myers Smith, Little Rock, addressed the Brinkley P. T. A. November 11th and the Little Rock Public Welfare Forum on November 15th.

N. T. Hollis, Little Rock, addressed the Little Rock district, Arkansas Federation of Women's Clubs November 17th on the work of the State hospital.

R. E. Rowland has been elected superintendent of the State hospital.

Dr. and Mrs. A. K. Wayman, Little Rock, spent a November vacation at Galveston.

A. C. Kirby, Little Rock, recently addressed the Y. W. C. A. of that city on "Communicable Diseases of Children."

John Redman, Fort Smith, recently addressed the Senior High School on public health problems.

MARRIED—J. B. Askew, Benton, and Miss Gertrude Pearson, Little Rock, November 28th.

Dr. and Mrs. R. M. Eubanks, Little Rock, spent a November vacation in Phoenix.

MARRIED—W. V. Newman and Miss Leona Glover, Little Rock, November 16th.

OBITUARY

JOSEPH L. ROE, aged 37, died unexpectedly at Little Rock October 24th. Born in Durham, England, in 1900, he came to the United States at the age of 12, his family moving from Utah to Jacksonville when he was 14. His preliminary education was obtained at Little Rock College where he graduated in 1923. His medical education was obtained from the University of Arkansas School of Medicine, graduating in 1927. Since 1928 he had practiced medicine in partnership with Dr. N. F. Weny, giving his special attention to gastroenterology. He married Miss Lorraine Phillips of Chicago December 31, 1928, who, with three children, survives him. In addition to his membership in the Pulaski County Medical Society and the Arkansas Medical Society, he was a Fellow of the American Medical Association and a member of the staffs of Saint Vincent's Infirmary and the Baptist State Hospital. He was a member of Our Lady of Good Counsel Church. As Secretary of the Board of Control of the State Hospital, he took an active interest in that institution and during the summer had visited a number of eastern institutions.

ROBERT LEE PAXTON, aged 73, died at his home in Sheridan October 29th. Dr. Paxton was born in Grant county and had practiced in Sheridan and vicinity for 47 years. He was married to Miss Adeline Hope in 1885, and they celebrated their 52nd wedding anniversary January 14th. A member of the Grant County Medical Society, he had served that organization as president in 1933 and was a member of the House of Delegates of the Arkansas Medical Society in 1935. Surviving relatives are his wife, two sons and six daughters.

ROBERT ADDISON MILLIKEN, aged 46 years, died suddenly of a heart attack at a Little Rock hospital November 1st. Following a mild attack October 29th, he had been confined to his bed but his condition had not been regarded as critical. Born in Indianapolis in 1891, he graduated from Groton in 1909, Princeton University in 1914, and from Harvard University Medical School in 1918. Subsequently he practiced in Indianapolis for several years, returning to Harvard University Medical School for postgraduate work in orthopedics and began practice at Little Rock in 1934 as the partner of Val Parmley. He was appointed chairman of the Crippled Children's Division of the State Welfare Bureau on July 1st and was actively engaged in the duties of this position at the time of his death. In addition to staff appointments at Saint Vincent's Infirmary, Baptist State Hospital, City Hospital and Arkansas Children's Home, he held appointment as associate professor of orthopedics at the University of Arkansas School of Medicine. A member of the Pulaski County Medical Society, the Arkansas Medical Society, the American Medical Association and the Southern Medical Association, he was a diplomate of the American Board of Orthopedic Surgery, a member of the Academy of Orthopedic Surgeons and of the Clinical Orthopedic Society and a lieutenant-commander in the United States Naval Reserve Corps. Civic interests included memberships in the Little Rock Country Club, the University Athletic Club and of the board of governors of the Kiwanis Club. Surviving are his wife, formerly Miss Opal Bundy, a son, a daughter, his father, two brothers and a sister.

CHARLES EDWARD RITCHIE, aged 61, of Stephens, died in the Camden Hospital November 16th following a cerebral hemorrhage. Born at Hampton in 1873, he formerly practiced there and at Ogemaw before moving to Stephens five years ago. He had been a justice of peace in Ouachita county for many years. A member of the Ouachita County Medical Society and of the Arkansas Medical Society, he was also a member of the various Masonic bodies and of the Shrine and the Methodist Church. Surviving relatives are his wife, a son, four sisters and three brothers.

RANDOM THOUGHTS OF THE SECRETARY

October 23rd. The old home town goes collegiate with gay spontaneity; the old grads, the coming generation, the grandstand quarterbacks and those who just like the game, take the place over for the day. Our usual lunch emporium preempted by casuals, we cruise about, finding food at a hamburger stand away from the throngs. Reasoning that others deem it impossible, we drive to within two blocks of the stadium and find a desirable parking place. A well-played game is offered, we particularly noting the attempts at field goal, the subject of so much post-mortem discussion following the T. C. U. game. In the evening joined by north Arkansas visitors, pleased with the day, themselves, and even with this oldster's repartee, all of which persuades us to become overly generous in hospitality.

October 30th. Homecoming is with us; this day to which Fort Smith looks forward with as much keen anticipation as does the freshman class. With Sid and Elizabeth we take an early start, delaying to enjoy good food on the cabin grounds, arriving in the stands at the kick-off, from thence on, mauled and thrilled as the fortunes of the game vacillate, finally to settle upon the Razorbacks with a decided margin of safety. Apparently determined that we shall get full measures of punches for excitement, John Andrews crashes a direct right to our upper sternal region, destined to cause us discomfort for a couple of days, much in the manner of a fractured rib. Observing in the governor's box, "Son" Corn of Lonoke, really going places. To the Richardson's where we meet a number of jovial souls, enjoy coffee and cakes, and hear from Raymond Cook of the Vienesse miss who called Ogden "dumkopf", the circumstances adding much to this estimate of the situation.

Dining late with host John Burns at his famed Gables and home in a leisurely driving fashion, discussing much of this and of that, ending the day at ten o'clock.

November 4th. From afar a fan letter reaches this column. That it comes from a relative by marriage does not detract; she has never been prodigal with her letters and we appreciate its complimentary references. There also arrives a communication from Stanley Gates, postage paid, really not deserving of comment in this column.

November 6th. The Lockwoods visit and gayety abounds, materially abetted by Sid. I. F. and Tommie.

November 8th. As a motoring guest of Wolfermann we take off for Little Rock in threatening weather, yet this same pair has oft driven these 160 miles under worse conditions, stepping into the Concordia Club within the time limits of etiquette, circulating about to greet more than one hundred good fellows, but chagrined at the affornt to our dignity as Joe Shuffield and, of all persons, McCaskill, bodily lift us from our seat and therewith and thereby transport us across the hall where we are priviliged to sit with the presiding officers of the past, the present and the immediate future. Returning, the weather somewhat improved, reaching the home town at 1:30 and then mostly concerned over the effort with which our car travels, ultimately arriving at the conclusion that this is a comparative feeling due to the floating comfort with which we cruised in Sid's Lincoln.

November 11th. Observing the first creditable Armistice Day program which has been held in this city for many years. Far more interested, however, to learn that the marine, scheduled to ride the float, became embroiled in the toils of the law shortly before parade hour, and was released only when the naval recruiting officer signed his bond. To us that is far more than an armistice—it is the millennium!

November 15th. This night the staff takes us for a ride upon a diagnosis of bone sarcoma but as yet we are totally unconvinced that a roentgenologist straddles an issue more than is done by the surgeon in failing to write his preoperative diagnosis until the conclusion of the operative procedure.

November 18th. Lunching with Shuffield, Bond and Cazort and other worthies, we hear much of allergy and at the same time, note the gentle persuasion with which Joe urges Robert Taylor of Conway to appear on the program of the Eighth District meeting. Discussing with Gebauer certain apparent defects in the basic science law, hopeful that plans for remedy may be fully effective. Meeting Sam Phillips on his way to judge a tuberculosis essay contest, in which he is repeating, evidently having remained anonymous on the first occasion. Almost excited as we watch the frenzy with which Hoyt Allen, fresh from "singing," circulates about to arrange (?) the testimonial dinner to the press. With the beginning darkness and murk of this day we entrain for Chicago, occupying ourself in various ways until nine when we take advantage of the relaxation afforded by a comfortable Pullman bed. Yet, noting from our window, the snow as it aimlessly falls upon an already white landscape, the trees and bushes appearing faintly outlined in haze, the rapid procession of gaunt telegraph poles enlivened by the glimpse of a red target lamp and the cozy yellow glow from farmhouse windows near and afar, and, at one small village, three men who trudge down the road, their lanterns swinging with feeble glimmer, the whole keeping our eyes close to the berth window for some thirty minutes past our contemplated slumber hour.

November 19th. Comfortably placed in Chicago, we first meet Cohenour of New Mexico, who suggests that we walk to the secretaries conference. This we do, the two of us regretting it every slippery, wind-bitten step of the way, yet having too much of youth in us to admit it. But with the close of the program we hail a taxi as one, admitting our preference for a ride. Taking a rather breathless but attentive trip over the American Medical Association building, gaining a multitude of impressions, among which is a view of our own biographical card. The planned program of the conference is practically overturned by discussion of the "430 Leaders of American Medicine." Joining the Rocky Mountain conference prior to dinner for an hour of banter, affording the opportunity to see Leland in the role of a jester rather than an economist, and acquiring some sort of personal notoriety as the result of the narration of the late Morgan Smith's tale of birth control. Thence to the editor's dinner where our Hoosier friend, Shanklin, ably presides and makes complimentary reference to this column. Seated with Olin West, Amerca's No. 1 Man of Medicine, we hear of the exploits of a Vanderbilt University Glee Club, of which he was a member, in Fort Smith during 1894. Further learning more of the sulfanilamide tragedies, an amusing incident being that of the youngster, under this particular treatment for a so-called social disease, the circumstances of which were unknown to the parents until the drug inspector called to reclaim the bottle, duly found, and sad to relate, plainly labeled as to its therapeutic intent. At 10:30

calling those at home for brief conversation and happily to our couch.

November 20th. Dispensing with our bit of pasteboard credentials for the Northwestern-Notre Dame conflict, procured for us after difficulties by Everett Moulton, the use of which would doubtless have required the construction of a portable greenhouse within the stands to accommodate our shivering body, we take occasion to personally visit the major toy emporiums of the city, thus depriving Mrs. Santa Claus of some of the pleasure which the season affords her.

November 21st. With gratification we take a cup of black coffee on the Missouri Pacific, a welcome relief from that dubonnet shade of liquid, dispensed to our horror as coffee in Chicago. Greeting and greeted with much warmth at home, later collecting a buck from Jones who thought that Stanford could take California in, and finding that we held ten dollars worth of lucky Zeros in the pot on the Razorback-Colonial impasse.

SAN FRANCISCO HOTELS 1938 AMERICAN MEDICAL ASSOCIATION ANNUAL SESSION

The Board of Trustees of the American Medical Association has appointed Doctor Howard Morrow of San Francisco as General Chairman of the Local Committee on Arrangements. Among other appointments of local sub-committees, Doctor Morrow has appointed Doctor F. C. Warnshuis, Chairman of the local committee on Hotels.

Fellows are requested to send in their requests for hotel accommodations to Doctor F. C. Warnshuis, Suite 2004, 450 Sutter Street, San Francisco, California, giving names of members in party, type of accommodations desired, time of arrival and departure.

Assignment of accommodations and their confirmation will be made for each reservation request. Do not write directly to any hotel as **all** reservations will be cleared through the Hotel Committee.

San Francisco affords first-class hotels capable of providing accommodations for 15,000 fellows and members of their families. However, early reservations are requested to avoid confusion and to insure individual choice. A pleasing surprise awaits every fellow in the hotel accommodations of the Golden Gate City.

Those planning to visit San Diego, Los Angeles, Santa Barbara, Del Monte, Yosemite, or other California cities are urged to write in advance for hotel reservations in these cities. Following the American Medical Association Annual Session, the Rotary, Kiwanias, and Shriners hold their annual sessions in California. It is quite probable that many of the members of these organizations will visit points of interest before their conventions, thereby creating heavy demands on local hotels throughout the State.

ATTENTION, READERS:

Existence of a journal depends to a large extent on revenue from advertisements. Continuance of advertisers depends on their patronage. Therefore, patronize those appearing in this journal.

"STONE WALLS DO NOT A PRISON MAKE NOR IRON BARS A CAGE"

Winter is a jailer who shuts us all in from the fullest vitamin D value of sunlight. The baby becomes virtually a prisoner, in several senses: First of all, meteorologic observations prove that winter sunshine in most sections of the country averages 10 to 50 per cent less than summer sunshine. Secondly, the quality of the available sunshine is inferior due to the shorter distance of the sun from the earth altering the angle of the sun's rays. Again, the hour of the day has an important bearing: At 8:30 A. M. there is an average loss of over 31%, and at 3:30 P. M., over 21%.

Furthermore, at this season, the mother is likely to bundle her baby to keep it warm, shutting out the sun from Baby's skin; and in turning the carriage away from the wind, she may also turn the child's face away from the sun.

Moreover, as Dr. Alfred F. Hoss has pointed out, "it has never been determined whether the skin of individuals varies in its content of ergosterol" (synthesized by the sun's rays into vitamin D) "or, again, whether this factor is equally distributed throughout the surface of the body."

While neither Mead's Oleum Percomorphum nor Mead's Cod Liver Oil Fortified With Percomorph Liver Oil constitutes a substitute for sunshine, they do offer an effective, controllable supplement especially important because the only natural foodstuff that contains appreciable quantities of vitamin D is egg-yolk. Unlike winter sunshine, the vitamin D value of Mead's anti-ricketic products does not vary from day to day or from hour to hour.

ABSTRACT

TREATMENT OF SYPHILIS

William M. Sheppe, M. D., Wheeling, West Virginia (West Virginia Medical Journal, February, 1937, page 61) summarizes his opinions as follows:

1. Do not procrastinate; make a clean-cut decision that a given skin or penile lesion is or is not syphilis, employing in this decision clinical acumen, dark-field and blood Wassermann examinations.

2. Begin treatment at once with arsenicals, following a systematic plan for each case.

3. Treat continuously without rest periods.

4. Alternate arsenicals with heavy metals.

5. Use every precaution to minimize untoward reactions.

6. Acquire dexterity in intravenous injections.

7. Explain at the beginning of treatment the expected duration of treatment period.

8. Do not be influenced by stories of "being cured with six shots."

9. Insist on yearly check-up examinations for at least five years, including blood and spinal fluid studies.

10. As a simple guide to treatment keep in mind the 30-0-60-5 plan.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

An executive board meeting of the Woman's Auxiliary to the Arkansas Medical Society was held October 27th at the Albert Pike Hotel, Little Rock. The meeting was called to order at 10:00 A. M. with twenty members present. Mrs. Curtis Jones, State Auxiliary president, presided. Committee reports were heard. The President appointed the following nominating committee: Mrs. H. E. Murry, Texarkana; Mrs. J. B. Crawford, El Dorado; Mrs. Ralph Steele, Fayetteville; Mrs. D. W. Goldstein, Fort Smith, and Mrs. L. T. Evans, Batesville. Mrs. Frank Haggard, president of the Southern Medical Auxiliary, was guest speaker. At the conclusion of the meeting luncheon was served.

In cooperation with the General Federation of Women's Clubs of the State of Arkansas, following a program outlined by the late Mrs. W. F. Lake of Hot Springs, the Auxiliary to the Pulaski County Medical Society was in charge of a radio broadcast from KTHS, Hot Springs, on the night of October 26th. The program is one of many to be given this winter by the Federated Clubs of the city of Little Rock, in a cooperative plan to "advertise" Arkansas to the clubwomen of the United States.

The program opened with two violin numbers played by Edward Wayman. Mildred Palmer accompanied him at the piano. Both these young people are students of the Little Rock High School and both are accomplished musicians. A resume of the work and aims of the Auxiliary to the Pulaski County Medical Society was read by the president, Mrs. Bryce Cummins. Mr. Herbert Sutherland, bass baritone, accompanied by Mrs. Sutherland, sang "Song of Songs," followed by that popular air "That's Why Darkies Were Born" from George White's Scandals. Mrs. K. W. Cosgrove, chairman of the obstetrical pack committee of the auxiliary, talked briefly on the School of Medicine of the University of Arkansas. Mrs. Harvey Thatcher, wife of the Professor of Pathology at the University, played a piano solo to close the half hour program.

MRS. BRYCE CUMMNS, President.

The Fifth Councilor District Medical Society met in Camden October 7th, with the doctors' wives invited in order that a Fifth Councilor District Auxiliary might be organized. The women met jointly with the doctors at dinner served in the parish house of the Episcopal Church. A delightful musical entertainment was enjoyed at this time, with numbers by Mrs. A. D. Mason, Miss Margaret Little and D. M. Graves. After dinner the thirty women adjourned to the Robins Clinic for their meeting. Mrs. R. B. Robins called the meeting to order and introduced Mrs. C. E. Kitchens of DeQueen, Mrs. O. J. T. Johnston of Batesville, Mrs. Curtis Jones of Benton, president of the Arkansas Medical Auxiliary, and Mrs. J. B. Crawford of El Dorado, president-elect of the Arkansas Medical Auxiliary. They made the addresses of the evening. The District Auxiliary was organized with the following officers elected: Mrs. R. B. Robins, president; Mrs. J. B. Wharton, El Dorado, vice-president; and Mrs. Sam Thompson, secretary. Three members are to be appointed as an advisory committee. Mrs. G. E. Cannon of Hope was a guest at the meeting. Counties included in the district are Union, Columbia, Calhoun, Dallas, Lafayette and Ouachita.

The largest representation was from Union County.

The Washington County Medical Auxiliary met June 15th with Mrs. H. H. Howze. This was a work meeting at which eleven members were present.

The Washington County Medical Auxiliary entertained with a picnic on July 1st to which the doctors were invited. There was no August meeting. A dinner meeting was held on September 7th, at the Washington Hotel, and another dinner meeting on October 4th at the hotel with 14 members present.

The Woman's Auxiliary to the Pulaski County Medical Society held the first meeting of the new year October 20th at the home of Mrs. R. M. Eubanks. Mrs. T. Duel Brown, Mrs. L. D. Reagan, Mrs. S. B. Hinkle, Mrs. D. T. Hyatt and Mrs. Robert Milliken served as cohostesses. Bronze chrysanthemums were used in the dining room and red roses centered the small tables where luncheon was served to the forty-five members present. Mrs. Bryce Cummins, president, presided over the business session and outlined the work for the coming year. Mrs. N. W. Reigler introduced four new members, and Mrs. W. A. Snodgrass, program chairman, distributed the year books. Bridge was played during the afternoon. The next meeting will be held at the home of Mrs. R. T. Smith. A memorial paper to Jane Todd Crawford will be given at the meeting.

Dr. Manning and Mrs. Schley Manning were hostesses to the Sevier County Medical Auxiliary Thursday October 21st in the home of Mrs. Schley Manning. Tapers, cosmos, marigolds and chrysanthemums emphasized the color note of orange, while black candlesticks, vases and bowls completed the scheme. Mrs. Clarence Hooper, of Horatio, arranged the following program: Lord's Prayer; roll call answered with medical current events; "Personal Question in a Case History," Mrs. R. C. Dickinson; poem, "Give to the world the best that you have," Mrs. Clarence Hooper. In the business session the president, Mrs. R. C. Dickinson, read communications from Mrs. Lorain Bennett in which she asked that publicity be given the radio program to be presented by the Pulaski County Medical Society Auxiliary October 26th, from station KTHS, Hot Springs. She also called attention to the fall board meeting of the Arkansas Medical Auxiliary to be held October 27th at Little Rock. Mrs. Dickinson is a member of the board from the Sevier Auxiliary and Mrs. Kitchens is a state member. The meeting date of the Auxiliary was changed from the third Thursday to the first Thursday in each month. The hour of the meeting remains at 2:30. Mrs. Leonard Hampson of Lockesburg will entertain the Auxiliary in November. Little Miss Marrietta Kimball, daughter of Dr. and Mrs. G. L. Kimball was complimented with a shower at the meeting. Refreshments were served to Mrs. R. C. Dickinson, Mrs. Clarence Hooper, Mrs. C. E. Kitchens, Mrs. C. A. Archer, Mrs. R. L.

Hopkins, Mrs. G. L. Kimball, Mrs. O. B. Tate, Mrs. J. S. Hendricks and the hostesses.

Mrs. Curtis Jones, Arkansas Medical Auxiliary president, was the speaker of the evening before the women of the Independence County Medical Auxiliary at the home of Mrs. Gray, president. Mrs. Jones spoke following Dr. J. B. Askew, County Health Unit Director, who talked on how the Auxiliary could help in the work of the health unit. Mrs. Jones stressed district organization in connection with county organization. She stated that the object of the Auxiliary is "To extend the aims of the medical profession in the advancement of health and education, and promote social fellowship among us." With a strong organization in Independence County, Mrs. Jones urged that an invitation be extended the wives of physicians in the district for a joint meeting when the medical society meets here next April for the annual spring session. Mrs. M. E. McCaskill of Little Rock and Mrs. A. S. Buchanan of Prescott, members of the State Auxiliary, were special guests at the dinner, and at the auxiliary meeting they made brief talks. Concluding the program Mrs. Gray was assisted by Mrs. J. J. Monfort in serving refreshments. Mrs. Jones was the recipient of a gift and of a corsage.

MRS. C. A. CHURCHILL.

Woman's Auxiliary of Bowie and Miller County Medical Societies had the pleasure of having as distinguished guests on October 29th, Mrs. Frank Haggard, of San Antonio, president of the Southern Auxiliary; Mrs. W. R. Thompson of Fort Worth, president of Texas Auxiliary, and Mrs. Curtis Jones, of Benton, president of Arkansas Auxiliary. The Texarkana Auxiliary complimented the visitors with a beautiful luncheon at Hotel Grim. The tables were decorated with black bowls of chrysanthemums in shades of gold and yellow. The place cards were autumn leaves, and the hand made nut cups were in keeping with the Halloween season. The new year books were in yellow wrappings were at each place. Mrs. N. B. Daniel, president of the Texarkana Auxiliary, presided and introduced the guests. Mrs. L. J. Kosminsky, chairman of entertainment, opened the program by introducing Alyce Finley who gave a clever reading, "Rest Cure in a Hospital." Mrs. Kosminsky then conducted an interesting mathematical contest. The three visiting officers spoke along general lines on the importance of auxiliary work and each one gave warm praise to the Texarkana group for its widely recognized work. The visitors all wore lovely corsages, gifts of the Auxiliary. Mrs. C. E. Kitchens of DeQueen, and Dr. Grace Haggard Barnes, of Jefferson, were called upon for talks. Other out of town guests were: Mrs. G. G. Haggard, Jefferson, Mrs. I. G. Jones, DeQueen, Mrs. P. H. Phillips, Ashdown, a member of the Texarkana auxiliary, and Mrs. R. H. T. Mann, Charleston, Missouri, a former member.

The Woman's Auxiliary to the Southeast Arkansas Medical Society met at McGehee, October 11th, in the home of Mrs. M. B. Leverett and enjoyed a lovely chicken dinner. There were eleven members and two visitors present. During the business hour the Christmas program was discussed. The social hour was spent playing games.

The Woman's Auxiliary to the Medical Association of Crittenden county met October 22nd in the home of Mrs. J. H. Matthews, president. A delightful luncheon was served by the hostess assisted by Mrs. Dale Burnett, to the members and two luncheon guests, Mrs. R. A. Scott, Marion, and Miss Lina Elam, Covington, Tenn., house guest of Mrs. H. S. Watson.

The meeting was then called to order by the president and the business of the day dispatched.

Mrs. T. S. Hare, Crawfordsville, first district chairman of the Auxiliary gave an interesting report of the district meeting held at Jonesboro last week. At this meeting Mrs. J. T. Irby was elected district program chairman. The next meeting will be held in Paragould in the early spring.

The Crittenden County Auxiliary voted to place Hygiea, Health Magazine, which is the official magazine of the American Medical Association for the laity, in the public school libraries of the county; also to aid in every way in communicable disease control.

MRS. J. T. IRBY, Secy., Pro. Tem.

Ideas for future programs for the Auxiliaries of the Washington and Sebastian County Medical Societies were exchanged, and informal reports on the current year's work were given, November 15th, when a social meeting of the two organizations was held at a one o'clock luncheon at Bellis Inn, Mt. Gayler. Twenty-six members were present. 14 from the Sebastian county unit, and 12 from the Washington county auxiliary.

Mrs. Alfred Hathcock, Fayetteville, vice-president of the Washington county organization, presided in the absence of the president, Mrs. F. R. Morrow, Fayetteville. The session voted to invite the state president, Mrs. Curtis Jones, of Benton, to attend a joint meeting of the two organizations in March, the date and place to be named later.

Mrs. J. S. Southard, president of the Sebastian county unit, announced the Sebastian County Medical Society and Auxiliary in co-operation with the Fort Smith Tuberculosis association, will give a banquet for representatives of the press Nov. 23rd at the Woman's clubhouse in Fort Smith. The banquet will be one of a series of state-wide dinners to be given prior to the launching of the annual Christmas Seal sale by the tuberculosis association. This year, Mrs. Southard explained, the medical societies throughout the state are assisting with the promotional work of the seal sale. Mrs. Southard also announced she and Mrs. I. Fulton Jones will be hostesses for the next meeting of the Sebastian county auxiliary, in January at the Woman's clubhouse.

In the group of Washington county auxiliary members present for Monday's party were the following officers; Mrs. Alfred Hatchcock, vice-president; Mrs. Hugh B. Henry, treasurer; Mrs. Dick Miller, corresponding secretary; Mrs. R. T. Henry, secretary; Mrs. H. H. Howze, publicity chairman, and Mrs. R. H. Huntington, Mrs. Fount Richardson, Mrs. E. L. Patterson, Mrs. C. B. Callen, Mrs. C. P. Sisco, Mrs. P. L. Hathcock Jr. and Mrs. J. M. Wallace. In the Sebastian county group were Mrs. Southard, president; Mrs. S. J. Wolfermann, vice-president; Mrs. C. S. Bungart, treasurer; and Mrs. Eugene Stevenson, Mrs. John Redman, Mrs. W. F. Adams, Mrs. M. E. Foster, Mrs. F. H. Krock, Mrs. B. B. Bruce, Mrs. S. B. Stubbs, Mrs. I. Fulton Jones, Mrs. G. G. Woods, and Mrs. W. F. Rose.

MRS. W. F. ROSE,
Publicity Chairman for Auxiliary of
Sebastian Medical Society

BOOK REVIEWS

Glaucoma and Its Medical Treatment with Cortin. Myopia: Its Cause and Prevention. By Emanuel M. Josephson, M. D., Member, American Academy of Opthalmology and Otolaryngology, American Association for the Advancement of Science, etc. Pp. 100. Illustrated. Price $3.00. New York: Chedney Press, 1937.

This small volume is written in a phraseology easily understandable by the man in general practice and should serve to well acquaint him with the dread disease—glaucoma. At the same time it makes an admirable "refresher course" for the ophthalmologist, but entirely lacking in a discussion of technical and patholigical details.

Operative interference in cases of simple glaucoma is unconditionally condemmed and therapy with the adrenal cortex hormone put forward as the method of choice in dealing with this condition. Chapter XI speaks of "disgruntled 'authorities,' with no knowledge of the facts, with operative axes to grind and with yawning purses to fill." Such remarks and the entire contents of Chapter XV detract considerably from an otherwise dignified and interesting presentation of the author's pioneering in the "cortin" therapy of glaucoma.

The last chapter "is a preliminary note of a detailed report of researches on myopia which will be reported in the near future in another volume." Here too, the author is advocating adrenal cortex therapy on the theory that myopia is due to a disfunction of the adrenal gland.

Manual of Diseases of the Eye. By Charles H. May, M. D., Consulting Ophthalmologist to Bellevue, Mt. Sinai and French Hospitals, New York; Formerly Chief of Clinic and Instructor in Ophthalmology, Medical Department of Columbia University, and Director of the Eye Service at Bellevue Hospital, New York. Edition 1937. Revised with the assistance of Charles A. Perera, M. D., Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department of Columbia University, New York. Pp. 498. 376 illustrations. Price $4.00. Baltimore. William Wood and Company, 1937.

This book has had 15 editions with 19 reprintings since the first edition in 1900. Over 250,000 copies have been sold, which evidences the popularity of the book. The book is designed, as have been the previous editions, for the general practitioner and the undergraduate medical student. All of the illustrations with the exception of a few cuts of instruments are the author's original drawings. The chapters on ocular manifestations of general diseases, and the ophthalmoscope have been rewritten. Changes in the technique of certain lid operations have been made, and newer operations for detachment of the retina included. Inclusion blennorrhoea, gonioscopy, dinitrophenol cataract and polaroid glass are some of the additions.

Methods of Treatment. By Logan Clendenning, M. D., Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; Consulting Physician, Kansas City General Hospital; Physician to Saint Luke's Hospital, Kansas City, Missouri. With chapters on special subjects by H. C. Anderson, M. D.; Ursulla Brunner, R. N., J. B. Cowherd, M. D., Paul Gempel, M. D., H. P. Kuhn, M. D., Carl O. Richter, M. D., T. C. Neff, M. D., E. H. Skinner, M. D., E. R. Deweese, M. D., and O. R. Withers. M. D. Sixth edition. Pp. 879. 103 illustrations. Saint Louis; C. C. Mosby Company, 1937.

The sixth edition of this work continues its position as one of the best texts available. The old subject matter has been brought up to date and the new additions are complete in essentials. No detail of procedure is too small to receive a thorough description. This fact alone makes the book valuable for reference. The first section considers the methods of therapeusis; the second considers the various body systems with applications of these methods of therapeusis in their diseased states. Dr. Clendenning and his collaborators are to be congratulated on the excellence of this book.

Clinical Urinalysis. By Robert A. Kilduffe, A. M., M. D., F. A. S. C. P., Director of Laboratories, Atlantic City Hospital; Pathologist, Atlantic County Hospital for Tuberculous Diseases; Serologist, Atlantic County Hospital for Mental Diseases; City Bacteriologist, Atlantic City; Serologist, Municipal Hospital for Contagious Diseases, Atlantic City; etc. Pp. 428. 40 illustrations. Price $4.00. Philadelphia: F. A. Davis Company, 1937.

This book is a comprehensive treatise on clinical urinalysis written, as stated by the author, primarily for the physician. A large number of the procedures given may be carried out by the physician himself or by a trained technician in his office laboratory. Various procedures are given for the same test with the one of choice, according to author, first. The composition of the various reagents is given. The fallacies are mentioned as are the most important features of the clinical interpretation.

This is a volume that should not only be in the hands of every physician but in every laboratory. Without doubt it will make for more accurate reports from the laboratory and for a better understanding of these reports by the physician.

The Traffic in Health. By Charles Solomon, M. D., Assistant Clinical Professor of Medicine, Long Island College of Medicine; Lecturer in Materia Medica, Training School for Nurses, Jewish Hospital of Brooklyn. Pp. 392. Price $2.75. New York: Navarre Publishing Company, Inc., 1937.

This is another book on the patent medicine racket, yet we do not feel that too many have been published. All books of this type can do much for the public health and scientific medicine, giving the lay public correct information on nostrums and the many forms of quackery which abound in this enlightened day. It is a duty of the medical profession to present such information to the public. This volume is not only of value for lay readers but serves equally well to acquaint the physician himself with the true character of a large number of present-day nostrums.

Surgical Treatment. By James Peter Warbasse, M. D., F. A. C. S., Special Lecturer in the Long Island Medical College; Formerly Attending Surgeon to the Methodist Episcopal and the Wyckoff Heights Hospitals, Brooklyn, N. Y., and Calvin Mason Smyth, Jr., B. S., M. D., F. A. C. S., Assistant Professor of Surgery in the University of Pennsylvania, Graduate School of Medicine; Surgeon-in-chief to the Methodist Episcopal Hospital, Phila., Pa.; Visiting Surgeon to the Abington Memorial Hospital, Abington, Pa. Second Edition, Thoroughly Revised and Reset. 3 Volumes with Separate Index. 2617 pages with 2486 illustrations on 2237 figures, some in colors.

Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $35.00 set.

This completely re-written, three volume work marks a definite contribution to surgical literature, covering the entire field of surgery from general surgical principles to the most minute details of the special surgical procedures. The material is presented in a well-arranged manner so that it is of value as a quick reference or as a source for exhaustive research on any particular subject. The special index is an aded feature.

This work should prove valuable to the student, intern and general surgeon. All phases of surgical diagnosis and treatment are thoroughly presented and much surgical pathology is discussed. The illustrations are profuse and remarkably clear.

Special mention should be made of the section devoted to the fundamental surgical principles such as first aid, bandage, amputations etc; subjects which are all so grossly neglected in the medical school curricula of today. The sections on gastric surgery and on fractures also merit special notice.

Management of Fractures, Dislocations and Sprains. By John Albert Key, B. S., M.D., Clinical Professor of Orthopedic Surgery, Washington University School of Medicine; Associate Surgeon, Barnes, Children's and Jewish Hospitals, Saint Louis, and H. Earle Conwell, M. D., F. A. C. S., Consulting Orthopedic Surgeon to the Tennessee Coal, Iron and Railroad Company, and the Orthopedic and Traumatic Services of the Employees' Hospital, Fairfield, Alabama; Associate Orthopedic Surgeon to the American Cast Iron Pipe Company; Attending Orthopedic Surgeon to the Crippled Children's Hospital, Saint Vincent's Hospital, South Highlands Hospital, Hillman Hospital and Children's Hospital, Birmingham; Member of the Fracture Committee of the American College of Surgeons, American Academy of Orthopedics and the Advisory Fracture Committee of the American Medical Association. Second edition. Pp. 1246. 1222 illustrations. Price $12.50. Saint Louis: C. V. Mosby Company, 1937.

Reviewing this work in its first edition in 1934, we stated "This volume is commended as a practical working guide to all practitioners interested in the treatment of fractures. * * Well-printed, amply illustrated, and authoritative in its presentation, this work should become a standard text." Our prophecy has been realized and the appearance of the second edition but emphasizes the value of this text. The new edition contains nearly one hundred additional pages of text and 57 added illustrations. In the revision, operative treatment of hip joint fractures has been stressed, the various modifications of the Smith-Peterson technic receiving full discussion. In the management of fractures of the spine, immediate hyperextension with the application of a plaster cast is considered the proper therapy. This is a complete treatise and the physician who deals with fractures, dislocations and sprains can ill afford to be without a copy.

Syphilis, the Next Great Plague To Go. By Morris Fishbein, M. D., Editor, Journal of the American Medical Association and of Hygeia, the Health Magazine. Pp. 70. Illustrated, Price $1.00. Philadelphia: David McKay Company, 1937.

Dr. Fishbein describes in lay terms the life story of syphilis and the measures essential for its eradication. Graphic charts and well-chosen illustrations serve to interest the reader.

....Manual of Roentgenological Technique. By L. R. Sante, M. D., Professor of Radiology, Saint Louis University School of Medicine: Radiologist to the Saint Louis City Hospital and Saint Mary's Hospital, Saint Louis. Fourth revised edition. Pp. 228. Illustrated. Price $4.50. Ann Arbor: Edwards Brothers, Inc., 1937.

This manual continues popular for the instruction of technicians and medical students as well as for practical reference in the x-ray laboratory. A number of illustrations together with subject matter descriptive of new technics have been added in this edition. References for futher reading are appended to each chapter. Roentgenkymography is discussed in satisfactory detail. The "Instructions to Technicians" appear in a more desirable arrangement. This book will be found useful by all persons engaged in roentgen diagnosis.

Obstetrics for Nurses. By Joseph B. DeLee, A. M., M. D., Professor of Obstetrics and Gynecology Emeritus, University of Chicago; Consultant in Obstetrics, Chicago Lying-in Hospital and Dispensary; Consultant in Obstetrics, Chicago Maternity Center, and Mabel C. Carmon, R. N., Chief Supervisor and instructor in the Birthrooms, Chicago Lying-in Hospital and Dispensary. Eleventh Edition. Revised and Reset. 659 pages with 292 ilustrations. Philadelphia and London: W. B. Saunders Company. 1937. Cloth, $3.00 net.

For thirty years Dr. DeLee's text has been a standard in the teaching of nurses. The present revision has no superior insofar as the requirements of diadictic teaching are concerned. It represents the studied selection of material and the simplification of subject matter in such a manner as could be accomplished only by years of association with the problems of teaching in this field. Taking cognizance of the growing tendency to hospitalize maternity cases, more detailed instruction is offered on the management of the institutional case. In order to permit nurses to offer more understanding and intelligent aid in the management of the obstetric case, the scientific side has been more exhaustively dealt with than formerly. It is very evident in reviewing the text that Dr. DeLee has made every effort to avoid individualizing technique and has attempted seriously to present basic principles in order to prepare the student for intelligent service whether she is assisting in a modern lying-in hospital or a river-front shanty.

Although frequently criticized as "too difficult" or "too detailed" this text still represents, in the opinion of the reviewer, the finest text obtainable for this purpose.

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ANXIETY STATES*†

T. A. WATERS, M. D.

As modern physicians we no longer think of the human being as a group of organs working together in some mysterious way. He is a thinking, feeling and acting organism at some point in his life between birth and death, and must be studied in terms of "natural history" as an "experiment of nature." This organism is in a state of flux, adapting himself more or less plastically to the "ever changing environment" in which he lives through a series of experiences, some pleasant, some unpleasant, some trifling, and some tragic. A sequential account of these experiences is called his "life story" or biography. From the standpoint of adaptation in general life we think of this organism, this "he" or "she", in terms of whole functions. The function of adaptation are the functions of the whole person, therefore, and are quite different from those of the component parts such as organs and organ systems, the special duty of the fscience of physiology.

Psychobiology is the science which studies these whole functions in the normal personality. It concerns itself essentially with the processes of mentation working in a state of more or less consciousness, serving as a means of adapting the organism to his environment in a harmonized, balanced way, an objective account of which is called behavior. As long as this behavior remains within the range of standard performance we refer to it as "normal", and include herein the mistakes, errors, blunders, failures and maladjustments of everyday life. On the other hand, when these whole functions or personality functions get "out of hand" and exceed the "normal" or standard range, we have more serious problems of adjustment with which to deal. Pschiatry concerns itself with these abnormal personality functions or reactions of the total personality in adapting himself.

Some abnormal reactions are "sweeping" in character, involving the personality to such degree that it loses the capacity to function independently, happily and efficiently. Often the patient must be protected from self-injury, self-mutilation and self-neglect; or prevented from doing such harm to others as homicide, assault, litigation, or the humiliation of his family. Obviously he may have to be detained or "quarantined" in a supervised environment or mental hospital. We see these "sweeping" reactions in such behavior patterns as depressions, excitements, delusional and hallucinatory states, confusions, stupors, processes with deterioration, and dementias.

On the other hand, some abnormal reactions do not involve the whole socialized personality but are more or less part reactions. These reactions derive their name from the fact that the individual's capacity for adjustment is only partially impaired, and in many cases there is relative efficiency except where the particular part disorder or dysfunction is involved. These disorders, by and large, have come down to us as the psychoneuroses, a verbal heritage from which it is difficult to free ourselves. Generally speaking they may be called "complaint disorders" and are simply substitutes for a normal, healthy, mature way of meeting and solving conflicts and obstacles which beset the individual's path through life.

Out of these abnormal part reactions arise such features as general complaining, restlessness, tremulousness, irritability, weariness, fatigue, hypochondrical trends, anxiety states, obsessions, compulsions, tension states, dissociated states, tics, habit spasms, occupation cramps, and certain attack disorders of a convulsive character. These complaints and symptoms have been grouped in a practical fashion by Adolf Meyer into a relatively small number of reaction sets. They are "general nervousness", states of irritable weakness or neurasthenia, hypochondriacal states,

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*Read before the sixty-second annual session of the Arkansas Medical Society, Little Rock, April 12, 1937.

anxiety states, obsessive compulsive states, hysterical reactions, motor neuroses, and **certain** epileptiform disorders. It is with the anxiety states that we are particularly concerned at this time.

"But how," you will ask, "do the strains of life, whether in the past, the present, or anticipated for the future, cause and precipitate such physiological reactions as we find in the anxiety states?" The answer is this. Through the processes of mentation and the autonomic nervous system and glands of internal secretion, the organs are constantly playing a part in the personality's general adjustment. Therefore, when faced with certain difficulties and strains in life, the organs and organ systems, through the effects of tension "protest", and these "protests" are the complaints and symptoms.

When considering the different reactions it is important to regard causes and effects from two angles—predisposing and precipitating. Some remarks about constitution are necessary for an understanding of predisposing causes. This concept comprehends not only individual structural arrangements and individual physiological functions, but also predispositions and tendencies in the processes of thinking and feeling which are more or less ingrained in the personality and which predicate certain behavior. Such tendencies in the final analysis are nothing more than "set ways" of reacting." When an individual is headed for a part disorder, these tendencies make the development of one reaction pattern more probable than the development of any other.

The predisposing factors or traits which obviously prophesy anxiety states, if sufficient load is put on the individual, are all first cousins of fear: timidity, shyness, supersensitiveness, overanxiousness, worrisomeness, anticipation, serious mindedness, conscientiousness, and easily destroyed confidence. These traits are nourished in a family atmosphere highly charged with friction, disharmony and insecurity, and favor the development of anxiety states.

In these states any set of organs may become implicated; the cardio-vascular apparatus is the one most frequently involved, but the respiratory, gastrointestinal and genitourinary are not spared. Symptoms referable to these systems are the physiological "protests" alluded to before, and arise in the setting of strain which the personality is forced to meet.

With great frequency in these cases one encounters such complaints and symptoms as palpitation, fluttering, dizziness, flopping or turning of the heart, sinking spells, trembling, sweating and flushing, weakness, a feeling of constriction in the throat and chest (the proverbial "lump"), pain around the heart, chest pressure, dyspnea, gas, indigestion, flatulence, diarrhea, frequency, sleeplessness, fear of being alone, of fainting, of becoming unconscious, of a stroke, of disease, and of **death.** In practically al lthese patients there is an eagerness to talk and a "reaching out" into the environment for reassurance and help.

Recall some incident in your own life when the protective biological reaction of fear asserted itself. Do you recall how you felt when you received certain bad news, or found yourself forced to make a speech before a large audience without adequate preparation? The expressions, "I was so scared I couldn't talk", "My heart jumped up in my throat", "I couldn't get my breath", "My knees were trembling", have not become the household expressions they are without some foundation in everyday life. As you think of these things you can easily see that they are responses to fear, anticipation and uncertainty arising in the manner so clearly described by Walter Cannon. Little notice may be given these responses unless some definite, concrete condition exists which is easy to identify; for example, death in the family, a serious illness, financial disaster, or a predicament threatening disgrace or imminent physical danger. Nevertheless we must remind ourselves that things less well defined can throw us. When such symptoms occur a patient does not understand their origin and therefore mistakes them for signs of an "organic" disease.

As a rule the anxiety states occur in the form of attacks, but there are frequently "equivalents" in the intervals. These consist of feelings of uneasiness, restlessness, tension and irritability. In a case featuring cardiovascular symptoms there will probably be attacks, which become more frequent as time passes. With more attacks there is more anxiety and anticipation, which in turn cause more symptoms and more attacks. In some cases there may be actual **panic,** a very serious problem.

Let us give attention to a few concrete situations which have precipitated anxiety reactions. I quote Richards (1), who has made her observations from a tremendous amount of case material.

"Removal of the teeth; operations, appendectomy.

Deaths in family, especially when due to heart trouble.

Accidental shooting.

Attempted murderous assault.

Automobile accident.

Fall from wagon.

Influenza.

Began during the War.

Criminal abortions (2) following pregnancy.

Quarrel with neighbors.

Knowledge of husband's infidelity.

Knowledge that husband had syphilis.

Worry over step-daughter's sex irregularities.

Broken engagement.

"Irregular or no work. Increasing number of family beyond level of economic maintenance. Strivings beyond capacity, work under pressure, night courses, and change of vocational activity.

"Sex conflicts and marital difficulties, infidelity, in two cases frigidity of wife; dislike of alcoholic husband; broken engagement; illicit sex relations; conflict about birth control, fear of pregnancy. In only two cases did frustaneous sex excitement occupy a prominent place. The use of contraceptives was admitted by many. The sex difficulties seemed to be more important when there were sex irregularities with conflict, or when "in-laws" were interfering.

"Alcoholism in husband or parent; mother deserted family; insurance and industrial compensation factors; religious conflicts of Catholic-Protestant marriages; jealousy of younger sibling; father in trouble about bootlegging; husband unstable and depressed."

In the anxiety state one sees **a biological reaction occurring in the human organism in which the personality as a whole reacts to some situation which threatens his safety, security and contentment.** As said before, the symptoms are usually misinterpreted by the patient and explained on the basis of "organic" disease, with serious import. This intensifies the symptoms and thus creates a vicious circle. In many cases the reaction makes its onset in a setting of frustrated sex life, but by no means is this always true! Some physicians may disagree with this statement, but remember that Freud himself did not maintain a rigid formulation of this disorder in terms of sex alone. Therefore coitus interruptus and a sex life fraught with inadequate opportunities for satisfaction and relaxation are not always to be held accountable.

In order to manage an anxiety state properly, the physician must realize that the treatment starts the minute he comes into the presence of the patient. Of all cases there is none more suggestible than one of these, so it behooves the medical adviser to be careful in his facial expression, manner of speech and actions. These individuals are quick to misjudge and may use statements made in terms of "organic" disease as a nucleus for the elaboration of hypochondriacal notions and trends.

To be remembered is the fact that in anxiety states one has to deal not only with the **attacks** but also with the part reaction which is the basis for the syndrome. The physician may be called during an attack, when the patient is stirred not only by his anxiety and the fear of impending disaster or death, but also by his family. One member may be crying, another rubbing the victim's hands, another running for a hot water bottle, or opening the windows for more air, and another may be calling the clergyman. The one thing the physician must not do is get "excited" himself. To the contrary he must size up the situation quickly, proceed calmly and deliberately, and dispell the family's fears. Then he should ask them all to leave the room except perhaps for one person to help with the examination. The pulse rate is of course increased and the blood pressure elevated—that is the rule. The patient's heart is examined carefully and in a reasonably detailed way, following which he is reassured that he is going to do well. It is a good plan to let the patient talk a bit and reveal his outstanding fear. In a high percentage of cases it is a **fear of death.** Many a patient is not disposed to say he is afraid of dying because he fears the physician or members of his family will ridicule him, which they certainly should not do. It is of therapeutic value to get him to state his fear so that he can be assured on that point directly.

But suppose you do not see the patient during an attack. As a matter of fact, the majority of these cases will come to your office, complaining of anxiety symptoms or revealing them secondary to some other complaint. Often they are ashamed to mention them and a lot of coaxing is necessary. It is absolutely necessary that the first step in the procedure be the obtaining of a clear cut **complaint,** for this is the keystone around which constructive understanding of the case is built. This does not mean that the patient's statements are to be the sole basis on which to formulate the complaint. It is useless to ask the average patient what he is wor-

ried about. He will say "Nothing." The physician's medical judgment and experience are therefore of great importance here, but no assumptions should be introduced. After the complaint is well understood, an accurate account of the development of all complaints and symptoms should be obtained, and their respective settings and dates of onset noted. This will cover essentially his adjustment over that period of time, and failure to get these facts means defeat. In dealing with anxiety states as with any psychoneurotic reaction it is necessary to touch upon extremely personal matters, since in the main these reactions are only evasions of unpleasant situations and problems. It is wise, therefore, to be dissatisfied at times with what is merely intimated by the patient, because experience has taught us that further questioning may reveal a more important underlying situation. Occasionally the patient will have to be encouraged to think about previous happenings in order to recall these relationships. He may want to put the emphasis on the attacks rather than the background of conflicts. He will frequently deny that certain things may have a bearing on the symptoms or attacks, and at a later date recall with greater accuracy dates and events and their connections. His theories about his condition should always be ascertained, with the sources of information contributing thereto, whether the statement of another physician, a neighbor, a fellow clinic patient, a medical book, quack advertisement or radio talk. Iatrogenic factors, those factors growing out of the statements of medically trained people, are of tremendous importance in the thinking of these highly suggestible individuals.

After obtaining an account of the development of the symptoms (present illness) it is then necessary to gather more facts concerning the background out of which the present illness came into existence. Many times the date of some difficult situation, problem, failure or misfortune in the past will coincide with the onset of his symptoms. Or he may be able to recall similar symptoms at an earlier date, but only when some situation arose later did he put an interpretation upon them in terms of "organic" disease. The predisposing tendencies alluded to above should be obtained here. He may mention certain phobias which were or were not present before the onset of his symptoms, such as fear of the dark or of crowded places. These are not to be taken for anxiety but features of anxiety manifested and conditioned at the time the phobia first showed itself, whether due to fright, emotional shock, or something else. Explanation of these phobias is frequently quite revealing, but often not easily reached.

Family history must not be overlooked, because here is often found a condition which the patient mistakenly gives personal meaning in terms of heredity. Some relative may have had heart disease, hypertension, thyroid disease, a cerebral hemorrhage, cancer, or a psychosis, in consequence of which the patient takes his own sensations to be forewarnings of a like disorder.

The patient's biography is now completed and study should be made of his present condition, one essential of which is a good mental status examination. This will determine the extent and nature of his notions and convictions, and whether it is a part reaction or one of "sweeping" proportions of which the anxiety features are prodromal symptoms.

Where the physician was not called to see the patient during an attack, the physical status examination is now carried out. Needless to say, this must be thoroughly and carefully done, with emphasis on the organ apparatus about which complaints are made. It is a good psychotherapeutic measure to complete this examination as soon as possible, with all laboratory work, electrocardiograms, basal metabolic rates, and gastrointestinal series, and any necessary consultations. This settles the question of "organic" disease once and for all. A high basal metabolic rate cannot always be taken at face value, nor an "overactive" heart as reported by electrocardiographic laboratories. These must be weighed in terms of broader settings, clinical judgment, and a knowledge of human nature. Examinations or laboratory work hanging fire stir up the patient's doubts and this in turn makes his case more difficult to handle. Attacks are certain to occur in the future but the examination is not to be repeated, because a repetition will stir up doubts and destroy the effects of reassurance and intensify symptoms, fixing convictions along hypochondriacal lines.

From the facts at hand a differential diagnosis can be made, but there are several points to be settled: The question of phobias; the effects of nicotine and alcohol as possible factors in producing ectopic beats which draw the attention of a body conscious person to his cardiovascular or gastrointestinal functions; the question of a toxic state; hyperthyroidism; hyperacidity; and the prodromal symptoms of anxiety

in a more serious condition of "sweeping" nature, as a depression, schizophrenic process, or early delirium.

A vital stage in the management of the case has now been reached. The physician is ready to give the patient an explanation and formulation of his condition. In a frank, matter of fact way he is told **his complaints have been given thorough consideration and his case studied carefully in a scientific way, but no "organic" condition can be held accountable for his symptoms; nevertheless they have a very definite cause, growing out of "nerves", and he must therefore collaborate with the physician in order to work out his problems.** Of course he will ask questions, but by means of concrete situations and his reactions thereto in terms of his own "life story", the physician makes clear to him what his trouble actually is. **It is to be remembered that he must be told in terms of his own "life story" about his growing insecurity and anxiety, the reactionary physiological "protests", symptoms and complaints thereto,** and the false interpretations he put on them in terms of "organic" or "body" disease. Of course he may disagree, because after all it is easier for him to accept a somatic or "organic" explanation for his condition than one on the basis of his maladjustment and reaction to personal problems. He may cling **tenaciously** to previous diagnoses of his condition for this reason. The average case by this time, however, has begun to see the connections between his life situations and symptoms. But remember that what the physician tells him may not necessarily be accepted. Often the symptoms themselves serve as a barometer, by means of which the effects of treatment can be judged. If they hang on one knows that the real situation has not been made clear through discussion and so could not be handled adequately, or that the patient is continuing to nurse doubts.

The physician now requests the patient to bring his wife, a relative or close friend to his office. In the presence of this person the nature of the disorder is made clear, but of course there is no violation of confidence. The case is then discussed in a matter of fact way and all persons concerned are urged to work for the common end: the overcoming of the attacks and the solving of his problems of adjustment. By giving this reformulation of his condition to a member of the family, the physician strengthens the original explanation and is able to advise the relatives against certain procedures, such as making a great deal over the attacks, showing undue sympathy, using spirits of ammonia, rushing him to bed, and calling a physician at every turn. Thus the patient cannot say the family is cruel, nor can he hold the attacks over their heads to gain some end, as some patients do. The patient is further told that there will be more attacks, many more. But if he has the stuff in him, and it is felt he has, he will gradually overcome them by handling himself intelligently. He is told that when the next attack comes on he will be terribly frightened and upset, but neither he nor his family must give in, keeping in mind the doctor's explanations of the attacks and refraining from calling the physician each time he has one. This fosters self-dependence. As time passes he will learn to master not only the attacks but also the anxiety and fear which have dominated his personality. The family is to treat the attacks in a casual way, whether at home, in the theater or on the street. In their presence the patient is advised to return to work or the setting in which the attacks occur as soon as possible, because he must eventually learn to face the situation and it is to his advantage to do so at the earliest possible moment. In some selected cases, however, where a return to the offending situation is not advisable, a carefully planned routine of such exercise as walking, golf or swimming, which builds up confidence in his body, dissipates tension and overcomes "mental fatigue" should be recommended. Great opportunities frequently lie in recreation. Occasionally a trip is wise, but not as a rule because wherever the patient goes he carries with him his biological make-up and problems of adjustment. In some cases the patient is requested to abstain from sex relations and the use of alcohol, in order to determine the role they may play; in other cases tobacco is cut down to a minimum for ten days or two weeks for the same reason.

By this time the average patient has begun to respond because of healthful inferences he has drawn from the history and discussions. In other patients, however, the symptoms may persist, either because the important factors in his case have not been touched upon or because of habit, which as the weeks and months went by facilitated the occurrence of the attacks. It must be remembered that the patient has to understand fully the symptoms or attacks with their relations to the important events in his life in which he was under emotional strain. Usually he is unaware of the cause and naturally resents having his bodily distress referred to as

imaginary. It is the physician's duty to make his interpretation clear to the patient. Frequently the symptoms are found to grow out of something that has caused a strain over a prolonged period of time. He is urged not to watch for attacks because doing so will bring them on. His attention is called to his body sensitiveness and anticipation, and the two factors are discussed in a commonsense way. Anticipation is shown to be useful only when used constructively to analyze the future and its possibilities. He is encouraged to prepare himself to meet surprises, emergencies and the unexpected, and to accept his reactions thereto, putting reasonable faith in them. Confidence must be established in himself to face situations and his body reactions thereto. Because pride and over-conscientiousness are often important, these are discussed also. With these principles of mental hygiene laid before the patient, other vital problems are gone into which before may have only been touched upon superficially. According to the law of averages, these are usually domestic and marital situations, work problems, finances, and previous medical contacts. When questioning about contacts with other physicians, one can weave in the fact that some people set for themselves too high a standard of health, which makes for body consciousness. The physician approaches these matters tactfully, and never until the patient is able to discuss them without getting emotionally upset. If this discussion is unproductive a more detailed study of his earlier life is necessary, giving consideration to relationships with parents, sisters, brothers, playmates, and friends in school; reactions to danger; and reactions to the unexpected, with the need for preparing himself to meet the surprises and emergencies of normal life brought in here. Consideration must also be given to illnesses, injuries, operations, sex misadventures, competitions in school and work, jealousies, general ambitions, religious problems, failures and mistakes. He is led to see that mistakes, not only past but present, have to be accepted in a philosophical, constructive way.

In discussions it is best for the physician to remain on the side lines, asking carefully thought out questions which allow the various factors to reveal themselves indirectly to the patient through his own thinking. This prevents emotional outbursts in the form of temper and dispute, argumentativeness, and feelings of shame, indignation or humiliation. The patient should always be kept at ease, with due regard for his feelings and personal sensitiveness. Often it is of great value to narrate a similar case, whether real or fictitious; for example, like reactions in the physician himself under much the same circumstances. Thus the patient is made to realize that these physiological manifestations are the results of uneasiness, insecurity, apprehension and fear, reactions which after all are nothing but exaggerations of the natural "bioloical responses in the process of adaptation."

There is no place in this regime of therapy for such drugs as digitalis, belladonna, or thyroid or ovarian extracts, unless there is a specific indication therefor. Usually there is not and their use serves only to miligate against the patient's acceptance of his condition on an emotional basis. Sedatives, too, are contraindicated, as relaxation exercises serve their purpose. But in the rare case where the physician's conscience feels that some drug must be used to reduce tension and encourage sleep, barbital, grains two and one-half (2½) two to three times a day is the one of choice. On the whole, tonics have no place in the treatment. The antiquated "rest treatment" is obviously contraindicated on the basis that it will make the condition worse by fostering more dependency and hypochrondriacal trends.

Results will show themselves when a psychotherapeutic regime similar to the one outlined above is carried out, with the family working hand in hand with the physician and the patient developing constructive insight into his problems and reactions thereto. He is re-educated to the origin of the symptoms and encouraged to put himself in situations deliberately to bring on the attacks or symptoms, and thus gradually build up a confidence based on repeated successes. He is led to see that self-possession depends upon an understanding of himself, of his thoughts, imaginations and actions; that and self-reliance are the goals he is to attain. Gradually the therapeutic interviews are spaced at longer intervals until finally he is able to go on his own resources. On the basis of these facts, it is clear that in the average, uncomplicated anxiety state one deals with a benign affair carrying a good prognosis, and quite amenable to treatment. But if it is mishandled hypochrondriacal trends can develop which eventually lead to a Chronic Invalid Reaction.

I know there have been surgical adventures to carry out various instrumental manipulations in the substance of the frontal lobes in such cases, but my own feeling is that the cases should be **very carefully assorted** and not labelled anxiety neuroses unless they feature the symptoms which

time and experience have taught us to be characteristic of this pattern of behavior. After this is done, there should first be carried out a carefully formulated therapeutic plan in keeping with modern psychiatric methods. If these time-tested, conservative procedures fail, one is then free to consider more radical methods along surgical lines. Certainly more work must be done by the competent men interested in this procedure before it can be accepted as a panacea.

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COMING MEDICAL MEETINGS.

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SPHENOID SINUSITIS*

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As you all know, the sphenoid sinus at birth is only a pit in the anterior surface of the sphenoid bone, and for the first few years of life does not develop of sufficient size to demand our attention..

Acute or chronic sinusitis in infants or young children is most always of the ethmoid or maxillary type. In fact, I have never diagnosed and identified a sphenoid sinusitis in a patient younger than from 16 to 20 years. This is probably due to the fact that the anterior wall is really an outgrowth from the posterior ethmoid cells on its outer part and the development of the Bertini cartilages which afterward become ossified and fill in the space between the ethmoid cells and the septum, leaving a small opening at the top of the sphenoid osteum. This all takes time in the machinery of development.

This paper is not going to be a resume of the literature on this subject; rather, it will be a review of my own personal experience in twenty-nine years of practice in our specialty. I may not be able to tell you one thing you do not know but I will tell you several things it took me years to learn. I began my practice during the days of the slaughter of the turbinates by a great majority of our followers and the radical extensive operations of the more bold, thereby building a class of lifetime patients for the nose-treaters, and contributing very much to the idea that one operation on a nose leads to another.

Now in regard to the sphenoid sinus, I like to speak of the acute sphenoid which is accompanied by severe pain and pus in the superior meatus, and of the chronic sphenoid which usually is hyperplastic in nature. The symptoms are much alike in each type but the complaint and the picture in the nose is a different story.

The acute sphenoid is preceded by a cold or associated with one, frequently it is a hangover cold that just will not get well. The symptoms generally are stuffy nose, discharge, dull or frequently severe headache, dripping into the throat, and altered voice. In fact, practically the same symptoms as any other sinus when those symptoms are not localized. Just as all maxillaries, all frontals and all ethmoids do not hurt, so do all sphenoids not hurt. But just as

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sure as a painful frontal is over that frontal and a painful maxillary is over that maxillary and a painful ethmoid is in the temple, so sure will a painful sphenoid be in the parietal region or at the base of the skull. This has been such a universal symptom and the results in the few cases of this nature that I have had have been so outstanding that these cases must not be overlooked. Remembering also that this pain when it does hurt is of a damnable nature.

The diagnosis in these acute cases generally does not require a great amount of skill if one is painstaking, unhurried and careful. My method of procedure is: first, get a complete history; then I spray the nose on each side with one half of 1% cocaine. I rest a few minutes and swab the nose on each side with 2% cocaine. I do this until the congestion in the mucous membrane has been relieved, so I can see into each meatus area. At rare intervals I have to use adrenalin. If I see the pus coming from the superior meatus I know it is from the sphenoid or the posterior ethmoid cells. I then take a very small cotton applicator of 10% cocaine and nine times out of ten I am able after a few trials to enter the sphenoid. Then by means of a very small sterling silver canula, a 10 c.c. syringe, and sterile warm water, I wash this sphenoid out. By lowering the head until the face is parallel with the floor, the pus will be washed out into the nose if there is pus. This all takes time and patience. I have seen these awful headaches relieved by one treatment. At times it takes two or three. I have never operated an acute sphenoid. If the nose is blocked when the patient comes to the office I frequently, after washing the sphenoid and cocaining the inferior turbinates, touch them well with trichloracetic acid. As regards the general treatment of these cases or septum surgery the time allowed for this paper will not allow discussion. I will say that I have never depended on an X-ray for my diagnoses in this class of cases.

Now in regard to the more important subject of this paper, the chronic or hyperplastic sphenoiditis. The presence of one or more of five symptoms in this disease has driven the patient to seek relief:

1. Headache
2. Discharge
3. Odor
4. Ears, Dizziness, etc.
5. Hurting eyes or poor vision.

First Symptom—Headache

The headache here is of the same type, same character and same location as in the acute, not so constant and not so severe but generally extending over a long period of time as from 6 months to 6 years, and by no history in my experience have I been able to connect them with any one individual attack of cold or flu. Now, do not for one minute get the idea into you head that I think all headaches I am describing come from the sphenoid. I have seen headaches at the base of the skull and parietal region produced by bad teeth, especially wisdom teeth, by uterine trouble, or gastro intestinal trouble. Then again there are headaches of this nature that I have seen no one relieve. We often want to call them nervous headaches but I feel that is an acknowledgment of medical weakness. Chronic sphenoid headaches are not confined to any particular time of day, may not be constant but are generally made worse by a jar, often are worse when bending forward or stooping.

Second Symptom—Discharge

This is a very uninformative symptom. There may or may not be a dripping into the throat. If there is a discharge, it will be into the throat and not out of the nose anteriorly. We have so many patients seeking relief from hawking, spitting with normal sphenoids, that I would not think of operating a hyperplastic sphenoid unless I had sufficient other symptoms to warrant surgical interference. Not infrequently I have seen large dry scales in the sphenoid area after the removal of which there is present a moist, pale atrophic-looking membrane.

Third Symptom—Odor

One thing a little out of the ordinary about this odor when it is present, is that the patient complains of it himself and his friends do not notice it. By closing the mouth and the rhinopharynx, then expelling a little air through the nose, they get the odor. This is not a very common symptom. I have seen it in only 3 cases. I would hesitate to call this a hyperplastic sphenoiditis. I would call this a chronic sphenoiditis. Of course, in these cases we have the post-nasal discharge. This odor is relieved by a removal of the anterior wall of the sphenoid and a few irrigations of the sphenoid. One is perfectly justified to operate this class of case when he is sure of the diagnosis and has eliminated or cured other diseased sinuses.

Fourth Symptom—Ears

I know of nothing that is as trying on our disposition and taxes our patience, our intelligence, and our skill as much as the myriad of symptoms of which the ear-sick patient complains. For ringing in the ears I have no treat-

ment, but for that stopped-up ear or conductive deafness we all know that correction of some nose, throat, or tooth malady gives much relief. The sphenoid is just another one of those sinuses, the infection of which and congestion around, produces a tubal catarrh, making the patient complain of stopped ears and defective hearing. About 4 months ago one of my patients developed acute suppurative otitis media in the right ear. In due course of time, about 3 weeks, the ear stopped running, drum healed nicely, yet he could hardly hear out of that ear. I inflated the ear several times without relief. The right maxillary sinus looked fairly clear to illumination. In desperation I washed it out. The result was about ½ c.c. of muco-pus. I requested that he return in 2 days for another washing. When he returned he said, "Doc, there is no use to wash this ear again. I am well, hearing as good as ever." I have never seen such spectacular results on ears from sphenoid surgery or treatment but have had 2 cases within the last year whose hearing have been wonderfully improved from opening the sphenoid. Both of these cases had wet, boggy membrane in the sphenoid area together with the positive X-ray findings. The good results you get in ear cases from sphenoid surgery are going to depend very much upon the accuracy of your judgment. If the teeth are all right, tonsils all right or out, maxillary sinuses not involved, sphenoid area wet and X-ray positive for sphenoiditis, then you are justified in operating the sphenoid.

Fifth Symptom—Eyes

Now in regard to the influence the sphenoid sinus has on the eyes, I like to divide these into two classes. First, we have the eye that aches and pains after reading a few minutes. Second, we have the eyes whose possessor complains of poor vision. In regard to the painful eye, we generally find perfect vision, no abnormality of refraction or muscle imbalance or if there is an abnormality, the same has been corrected with no relief to the patient yet this patient complains and says he can read not over thirty minutes without awful pain in the eyes. In fact, he has to stop reading for 20 or 30 minutes, then can read again for only a few minutes without pain. One must be careful in these cases before condemning the sphenoid sinus, the underlying causes of eye pain are so protean. I am taking for granted that this patient has had a complete diagnostic workout by a competent internist, also has had the teeth eliminated by an efficient dentist or roentgenologist. Now, considering all the above has been done and no relief obtained, then we are justified in operating if our physical findings and X-ray report are positive for hyperplastic sphenoiditis. Our physical findings will not be of much value as not infrequently the only finding will be hypertrophy or jamming of the middle turbinates. At times, the enlargement of the blind spot as taken by the Bausch & Lomb Sterio Campimeter will aid much in the advisability of an operation. Our most determining factor here is a thickening of the sphenoid line as shown by the X-ray picture. To be of value to us this picture must be taken and interpreted by one versed in this particular work. In fact, I see many X-ray pictures of the sinuses that are absolutely worthless or uninformative as regards the sphenoid. Now to summarize, the refraction, eye muscles, teeth and constitutional causes eliminated, we are justified to enlarge the sphenoid opening if the X-ray is positive and especially if the blind spot is also enlarged or the middle turbinate enlarged or both.

Now in regards to the eye whose possessor complains of failing vision: The cause of this one symptom has caused me more mental worry than the cause of all other diseases in our field. If the patient has a brain tumor, high blood pressure, lues, an injury or senile degenerative changes, we feel pretty safe in our deductions. Add to these the cases of albuminuria and diabetes and our positiveness is most at an end. As this is a paper on sphenoiditis, I will not elaborate on the so-called T. B. cases that are almost impossible to prove.

There is a predominant eye symptom that stands out so prominently in these cases that we should always suspect the sinus. The patient complains that the sight is failing. On testing we get 20/20 vision in each eye. "Yes," the patients say, "I can see those letters, yet I know I cannot see good." The fundus may show no pathology or it may show a few choroidal or yellowish retinal spots. Almost always there will be an enlargement of the blind spots, one or both. There may be a contraction of the fields or scotomata. If I get the above picture with a report from the X-ray of hyperplastic sphenoiditis, I feel justified in surgery. Of course, I would want lues, teeth, albumen, and sugar eliminated but time is such an element I would operate regardless, unless lues was present.

Now a few words about operating on the sphenoid. In 1908, while taking a course in sinus surgery in New York, I asked my instructor

to show me how he opened a sphenoid. "Oh," he said, "that's easy. Just take a forcep and push into the sphenoid so." After he left I followed that forcep's hole and found he had punctured the brain above the sphenoid. Some instructor! It is useless to say that scared me. I never was a bold operator and only in desperation have I taken chances, but as my familiarity with the inside of the nose grew, I began to probe the sphenoid frequently. Later, I purchased Dr. Sluder's sphenoid knives and it is almost impossible for me to say too much for them used cautiously. It is almost impossible to do damage with them. If one cannot find the natural opening he can follow the roof of the nose backward until the posterior wall is encountered, which is the anterior wall of the sphenoid, then drop the handle of the instrument and press downward and backward into the sphenoid. Having entered the sphenoid, pull forward. Do this 3 or 4 times, then by means of a biting forcep enlarge the opening. I have never curreted the sphenoid. I have gently pulled polypi out and mopped with cotton. Ventilation is what I work for. I remove the middle turbinates in about 50% of my operative cases, but prefer to leave it as a guide until I have entered the sphenoid. If one will stay close to the septum in these operations, there is very little danger of a severe hemorrhage. If I have not removed the middle turbinate I seldom pack, but if I have to, I pack a strip of gauze into the sphenoid and turbinate area for 24 hours.

REPORT OF CASES

1—Mrs. C. C., age 35, was brought to St. Vincent's in an ambulance, history severe headache in the back of the head for one week, temperature 99 to 101, had to be given opiates every few hours, mental condition uncertain, all physical and blood examinations negative. X-ray showed sphenoid line thickened on each side. Nose examination was practically negative. After extensive consultation both sphenoid anterior walls were removed with complete relief of pain in 2 or 3 days.

2—Mrs. R. R. A., age 34, main complaint bad odor to herself in the nose, family did not notice it. Dripping into the throat, much hawking, no headache. Inspection showed mucopurulent secretions in the left superior meatus, pus washed out the left sphenoid. Anterior wall of left sphenoid removed. 1% phenol in mineral oil injected into the sphenoid at intervals for 3 to 4 months, complete relief.

3—Mrs. I. R. M., age 55, main complaints hard hearing, stopped ears, dizziness at times, noises in the ears. Nasal examination revealed all turbinates atrophic, no scabs. Sphenoid area wet and mucous membrane boggy. X-ray showed sphenoid line thickened, anterior wall was removed, 1% phenol oil injected at intervals for 2 months. Much relief.

4—G. W. H., medical student, first seen in June, 1935. History severe pain in the eyes after 30 or 40 minutes' use. Had been refracted by two able ophthalmologists. Muscle imbalance within normal limits. Refracted under homatropine, glasses found o. k. Patient not seen again until December, 1936. Never had gotten relief. Blind spots slightly enlarged, middle turbinates hypertrophied, sphenoid line thickened as shown in X-ray, middle turbinates removed, large opening into each sphenoid. Now patient can read for hours with no inconvenience. Does not wear glasses.

5—S. P. McK., age 52, came into my office September 17, 1927. History poor vision in each eye. Had acute iritis in right eye last December and again this year in May, visual fields show moderate enlargement of blind spots more pronounced in the right. Both eyes show mild papillitis, right shows fine and coarse floaters. X-ray shows both sphenoids involved. This patient had been the rounds and had been examined by some of the best ophthalmogists we have. No attention had ever been given to the sphenoids. Vision was 20/200 in each eye, not improved. A large opening was made into each sphenoid. No other treatment given. Patient's vision gradually improved until last seen in May, 1929 when vision in right eye was 20/40, left eye 20/20 with a plus .50 sphere.

SAN FRANCISCO AMERICAN MEDICAL ASSOCIATION MEETING JUNE 13th-17th, 1938.

Members should write today if they contemplate attending the American Medical Association meeting in San Francisco this June and obtain their hotel reservations. See recent issues of the Journal of the American Medical Association giving list of San Francisco Hotels and rates. Send in your requests to Doctor Frederick C. Warnshuis, 450 Sutter Street, San Francisco, California, giving names of members of your party, type of accommodations desired, rates, date of arrival and departure.

The San Francisco Session promises to be an outstanding one by reason of the scientific program, scientific and technical exhibits and the social functions. In addition, there is the lure of California with its scenic beauty, majestic mountains, fertile valleys and historical background. An opportunity presents to combine profit of the program with the pleasures of visiting San Francisco, the Golden Gate City with the two bridges, engineering wonders of the world.

Come by train, boat, auto or plane—no matter how—but come. Your visit will ever be one of pleasant memory. San Francisco and the bay area medical profession anticipate the pleasure of being your hosts and cordially invite you to come to the San Francisco Meeting.

Watch the Journal of the American Medical Association for program features and events.

PRE-NATAL CARE*

I. FULTON JONES, M. D.
Fort Smith

The special attention given obstetrical patients has become a well rounded system and given the name, pre-natal care. The object of this care and supervision is to conduct a woman through her pregnancy, labor, and post-natal period with the minimum of mental and physical discomfort and a maximum of mental and physical fitness with the reward of a normal healthy living baby.

Many women go through their pregnancies with little or no difficulty and without significant harm to themselves. On the other hand numerous women begin their pregnancies handicapped by previous disease, i.e. tuberculosis, nephritis and heart lesions. There patients need the closest supervision during their pregnancies. They need to be guided in such a manner that when they arrive at term they are in the best possible condition to meet this climax. Others develop diseases and complications, which would not be detected if they were not closely watched both objectively and subjectively. Since it is impossible to predict which ones will have difficulty either during their pre-natal period or labor, it behooves us to take the same meticulous care of each person who presents herself during gestation.

Women in increasing numbers are consulting their physician as soon as they miss one period and so we must first make a diagnosis of pregnancy. After this diagnosis is made, the patient should have a complete history, physical examination and laboratory studies. The history should include past history of difficult labors, heart or kidney trouble, tuberculosis, syphilis, accidents, and operations as well as her husband's past history.

A physical examination should follow the history; this should include examination of the heart, lungs, blood pressure, weight, focal infections, abdomen, back, extremities, temperature and pulse. It is well at this time to make smears from the cervix and vagina and have them examined for gonococcus and trichomonads. The pelvic measurements should be made and recorded at this time and again checked at the end of the 7th month to see if there has occurred any change. Laboratory data including a urinalysis, Wassermann, complete blood count and, if necessary, a Friedman test, should be taken at this time.

At the first visit to her physician the patient should be requested to have her dentist check her teeth closely for any cavities that may be present. She should also be advised concerning false superstitions that are held concerning the welfare of herself and her baby. Try to gain her confidence to the extent that she will come to you with all the questions that naturally arise from this experience and will not trust some "kindly old lady" or "friend." She should be informed that nature is usually very kind and sends out warning signs before danger develops and it is important for her to recognize and report these signs whenever found. These signs in the main are bleeding, excessive vomiting, visual disturbances, headaches, swelling of face, hands or ankles.

The patient is then told to report in person every two weeks with a morning specimen of urine, at which time a routine examination is made. These routine examinations should include weight, blood pressure, urinalysis and temperature. The patient should be questioned closely concerning any symptoms of complications that might have arisen or any change since her previous visit.

It is well for the parturient to realize that the foetus is a parasite and receives its nourishment from maternal tissues. It will take from the mother those substances that are needed for fetal nourishment and growth. Dieting on the part of the mother will have no effect on the weight of the baby. Therefore it is necessary for the mother to take a balanced diet sufficient to replace the elements that are used up by herself and the foetus. Excessive gain in weight should be curbed by limiting the fats and starches. Vitamins are very necessary and should be included during the last months, using those from a commercial source as well as those included in the diet.

Leafy vegetables, fruits, eggs and milk should be included in the daily ration. Certain minerals are necessary, especially calcium and phosphorous; these are supplied in milk (one quart a day), but it is also well to add some form of calcium as the gluconate or the dicalcium phosphate. Fluid balance must be maintained and this requires at least 8 glasses of fluids daily.

Many minor complaints may need attention, chief among them being constipation, which is best remedied by roughage, and some mild oil, such as petrolagar. The patient should be warned against the use of drastic laxatives.

*Read before the sixty second annual session of the Arkansas Medical Society, Little Rock, April 13, 1937.

Moderate exercise is very desirable and is best taken in the open air. All forms of violent exercise should be forbidden, as horseback riding, tennis, swimming, climbing, etc.

The patient should be warned against tub bathing in the last 4 weeks. Intercourse should not take place at this time, in order that no infection take place from this source.

Alcohol and tobacco in moderation are being indulged in by a large number of our young patients. If kept in moderation they will have no deleterious effects on the mother or foetus. The dress should be simple and comfortable and all constricting garments, especially corsets and garters should be avoided.

Weight has become a good guiding star as to the patients progress. The average patient should weigh the same at the end of 3 months as she did at the beginning of pregnancy. In the next 3 months she is allowed a gain of 2-3 pounds monthly, in the latter 3 months she is allowed a gain of a pound a week making a total gain of 20-25 pounds. Be suspicious of a sudden gain in weight for this may be the beginning of a toxemia with edema taking place in the tissues. The patient should be given a salt-free diet with no proteins, and if the weight remains stationary or increases without delay a more careful check of the urine and blood pressure should be made for an impending toxemia.

Nausea and vomiting in the first 3 months appears in a majority of cases and has been taken for granted in the past. It is now considered a mild toxemia although we realize that there is a large psychic element, i.e. rarely seen in illegitimate pregnancies. Dry diet in small amounts with some hormone therapy is the best treatment we have today.

Whenever bleeding takes place then it is essential for the physician to know of it immediately and institute steps for its control. If it is in first 3 months, it is probably a threatened abortion, more rarely an ectopic. Rest in bed with an opiate will often allow the threatened abortion to carry on to term. If the hemorrhage is in the latter months of pregnancy it is either a placenta previa or abruptio placenta, both conditions requiring hospitalization. No vaginal examination should be made except when the patient is in the hospital with every thing ready to do an immediate transfusion and delivery if necessary.

Toxemia and hemorrhage are the two dreaded complications and so we must always be on the lookout for them. It is only the men who are "toxemia conscious", and suspect its arrival who are ready in advance to meet its approach. Sudden gains in weight, headaches, visual disturbances, albumen in urine, swelling of the face, ankles or hands, rise in blood pressure, are all suggestive of impending trouble. A systolic reading of over 140 and diastolic of 90 or over are also suggestive. Early recognition and proper treatment are necessary to save mother and child. Only by early recognition and treatment will we be able to reduce its mortality.

Syphilis if found (and a routine Wassermann should always be done), immediate treatment instituted, and carried out throughout pregnancy will result in a normal healthy baby. If treatment is not instituted then a premature labor usually ensues with death of the child or birth of a syphilitic infant. Women rarely present the primary evidence of syphilis; so they usually do not know that they are victims of the disease. From this we see their denial of veneral infection does not mean anything. If the smears that were made show gonococcus, then immediate treatment should be given and extra care employed during labor to prevent opthalmia neonatorium of the baby.

We often see cases of pyelitis in pregnancy which will respond to rest, fluids, and alternating alkanization and acidification of the urine. Of late we are using mandelic acid treatment with success. Anemia is of the hypochromic type and responds well to iron. Muscle cramps have about disappeared since we began the use of calcium.

SUMMARY

1—Pre-natal care is an essential part of any modern obstetrical practice.

2—It should begin at the earliest possible moment that pregnancy is suspected.

3—It should consist of complete history, complete physical examination and all the necessary laboratory data, especially urinalysis and Wassermann.

4—Establish confidence in the patient that you will do everything for her and her baby's best interest.

5—Advise her of the danger signals and that you must be notified immediately of their occurrence.

6—Remove all fears and superstitions that she may have.

7—Instruct the patient concerning routine office visits.

RESOLUTIONS

IN MEMORIAM

What is this Death—
That mortal clay should dread?
We may not pierce the veil
That hangs in somber folds
Ever beyond our touch—
Until it is lifted, gently—
Mysteriously,
And we pass thru
To eternal light.
So little time—
Why should we mourn?
We—who wait our turn
To follow those,
Who but this little while
Have passed that way—
And all things know.
Grieve not for them—
They live on
In every treasured memory—
In every thoughtful deed—
Deeds that make the harsh stones
We tread, softer and kinder
To our weary stumbling feet.
This is Death!

MRS. JOE PARMLEY.

JOSEPH ROE

It is with profound sorrow that we chronicle the passing of one of our cherished members. Dr. Joseph Roe.

Scarcely had he begun his profession when the hand of death removed him from our midst.

A man of keen mind and noble heart, though a practicing physician for but seven years, he had built up a tremendous practice. He was beloved by all his patients, and that he would have risen high in the medical profession is unquestioned.

Joseph Roe was an altruist, a lover of all men. By nature amiable, kind, and thoughtful, he found his greatest joy in the service of his fellow-men. No task was too hard, no work too arduous for him to perform for the good of others. His deeds of loving kindness and of altruism are indelibly imprinted on the hearts of countless friends and acquaintances whom he helped in times of joy and of sorrow. His name and his memory will be everlastingly enshrined in the lives of those of us who knew and loved him.

In recognition of his life of devoted service and selfless consecration to the medical profession of Arkansas, we, the members of the Pulaski County Medical Society, express our profound sorrow at the passing of our friend, and we inscribe this testimonial of love and affection on the minutes of our records.

To the sorrowing widow and family, we send these expressions of condolence and pray that Almighty God may comfort them in the great sorrow that has befallen them. His memory will abide forever as an undying benediction.

(Signed) M. J. KILBURY, Chairman,
N. F. WENY,
STERLING BOND.

ROBERT ADDISON MILLIKEN

Whereas, Doctor Robert Addison Milliken, a member of the Pulaski County Medical Society, passed away on November 1, 1937.

Whereas, Dr. Milliken was a man of fine personality, of unvarying courtesy and the highest integrity of unusual talents and eminently distinguished attainments; as a citizen stood high and wielded a good influence, a man who although in our midst only a few years had attained prominence in civic activities, who had successfully organized the Crippled Children's Division of the State Welfare Bureau from which department his loss will be deeply felt.

Therefore, Be It Resolved, That the Pulaski County Medical Society deplores the loss of one of its most esteemed members, whose memory we will ever cherish as a man who in his daily life exemplified the spirit of a life of service.

Resolved, That we, the City and State, have lost one of its most useful, valued and best loved citizens; and

Resolved, That we respectfully tender the family and relatives of the deceased our most sincere sympathy in their bereavement, and that these resolutions be spread upon our minutes and a copy be sent to the family.

(Signed) DR. H. S. THATCHER,
DR. B. A. RHINEHART,
DR. K. W. COSGROVE,
Committee.

SHELBY BOONE HINKLE

The Pulaski County Medical Society deeply deplores the passing of one of our beloved members, Dr. S. B. Hinkle.

The Society feels that it has lost an untiring worker and leader, who, at all times, was inspired by courage and guided by common sense and unselfish devotion to duty in the advancement of Medical Science.

To know Boone Hinkle was to love him. His host of friends all feel that truly a pillar of strength is gone. In his going, he has left a record as high in achievement as it was faithful in performance. His life, devoted to the sick and afflicted, his genial personality, his unswerving loyalty to duty, all exemplified his true character.

To the bereaved wife and family we extend our sincere sympathy.

(Signed) ROBERT CALDWELL,
R. M. EUBANKS,
H. FAY H. JONES,
Committee.

The Council of the Arkansas Medical Society deplores the passing on December 5th, 1937, of Dr. S. B. Hinkle. This council is deprived of a beloved leader and colleague; Arkansas has lost one of its most distinguished citizens, and organized medicine loses one of its loyal members, whose thought and effort were freely given to its advancement.

The University of Arkansas School of Medicine has lost one of its most brilliant teachers, as Dr. Hinkle possessed in rare proportions a genuine interest in youth and the ability to teach, compounded of tact, sympathy, poise, firmness and good judgment.

Therefore, Be It Resolved, that the Council of the Arkansas Medical Society extend its sympathy in deepest measure to the bereaved members of our brother's family, and that we share in the solemn pride that is theirs because of his beautiful and inspiring life.

W. A. CLARK

Whereas: God, in his infinite wisdom, has suddenly taken from us, our friend and brother worker, Dr. W. A. Clark, Bald Knob, Arkansas and whereas: Dr. Clark was known, and respected by us, for his unassuming skill, his geniality, his kindliness and charity both as a physician and a citizen. These qualities marked a full life devoted to his fellowmen, and created in his associates a desire to emulate his ethical dealings with society and his fellow physician.

Therefore: Be it resolved that the White County Medical Society in session assembled express our appreciation of the splendid service that Dr. Clark has rendered the citizenry of this county, and this society individually and collectively and recommend to the members of this society that they follow the ethical precepts of this kindly man and,

Be it further resolved that we express our sympathy to Mrs. W. A. Clark and family for their irreparable loss, and a copy of these resolutions be sent Mrs. W. A. Clark and family, and the Journal of the Arkansas Medical Society, and that a copy be spread on the minutes of this Society.

Signed. A. J. Dunklin, M. D.
Dewey Sloan, M. D.

C. E. RITCHIE

Whereas, God in his infinite wisdom has suddenly snatched from our midst our friend and colleague, Dr. C. E. Ritchie, of Stephens, Arkansas; and

Whereas, Dr. Ritchie was endeared to us by his genial personality, his kindliness and charitable nature while in Stephens and Ouachita county. Not only did his traits of character appeal to us and make us desire to emulate him, but we shall ever remember his medical skill. He was ethical in his dealings with other physicians and was a friend to all who knew him. He was not only a leading man in his profession, but was one of our best citizens.

Therefore, Be It Resolved, That the Ouachita County Medical Society in session assembled, express our appreciation for the noble work that Dr. Ritchie has done among us and that we recommend to the members of this society that they follow the high ethical standards which Dr. Ritchie unfailingly followed; and

Be It Further Resolved, That we express our sympathy to Mrs. C. E. Ritchie and son for their irreparable loss, that a copy of these resolutions be sent to Mrs. C. E. Ritchie and son, that copy be spread on the minutes of this society and that a copy be sent to the secretary of the Arkansas Medical Society.

R. R. ROBINS, M. D.,
J. S. RINEHART, M. D.,
R. C. KENNERLY, M. D.,
Committee.

THE JOURNAL
OF THE
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W. R. BROOKSHER, M. D., Editor
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

THE JOURNAL WISHES YOU
A YEAR OF HAPPINESS
AND PROSPERITY
AND THE SOCIETY—
ITS GREATEST YEAR!

EDITORIAL

THE NEW YEAR

Without making any claims, The Journal suggests the following resolutions for 1938:

1. That every member promptly pay his 1938 membership assessment to his county society secretary.

2. That every member read his national, state and county society constitutions and by-laws.

3. That every member inform himself as to the activities of his national, state and county societies.

4. That every member feel encouraged to offer suggestions for new activities.

5. That every member consider himself a committee of one to support those policies approved by his societies.

6. That every member not only keep abreast of advances in scientific medicine, but that he also fully inform himself on the social and economic programs relating to medicine, so that he can more intelligently aid in solving them.

If but a slight majority of our membership would fulfill these requirements in the coming year, organized medicine in Arkansas would fully come into its own. There would be no further necessity to plead for "unity," for "cooperation," or for "support."

An informed and unified medical profession is absolutely essential for the days ahead. We should not delay the realization of this aim.

PUBLICITY

Medical organization has been slow to recognize the value of constructive publicity. There has been a too strict adherence to a false concept of ethics in this respect. Proper interpretation of medicine's code of ethics shows no denial of the propriety and right of the profession, as an organization, to speak for itself. The med-

ical profession should be appreciated as the best qualified authority on medical and health subjects. For this reason alone, medical organization should proceed to disseminate its knowledge and advice.

As employed by countless other organizations and agencies, publicity has added greatly to the public interest in their respective causes. In fact, the aims of many a charitable and benevolent group may truhtfully be said to have been almost entirely achieved by constant, adequate publicity. The same is true of many a proposition, quite devoid of merit, yet foisted upon the public by intriguing propaganda.

In Arkansas, two county societies, Ouachita and White, pioneered the way for press publicity nearly two years ago when they inaugurated a weekly health column in their local newspapers. There is ample evidence that these have been well received. The use of the radio has been sporadic; but one society, Sebastian, is now regularly engaged in broadcasting health talks.

More attention should be given to this potent weapon, practically ours for the asking. At the recent council meeting, the Committee on Public Relations was requested to arrange for the appearance in the newspapers of the state of a weekly health column under the auspices of the Society. This is a step in the right direction. County societies are urged to give this matter full consideration, not only as to the development of proper publicity procedure within their own communities, but also by conference with the press of their localities, in order that the material released by the Committee on Public Relations may have a sympathetic hearing. The newspapers of the various counties will be encouraged to carry these messages sponsored by the Society if members will request such cooperation.

FELLOWSHIP IN THE AMERICAN MEDICAL ASSOCIATION

There seems to be considerable confusion relative to membership and fellowship in the American Medical Association. A member of a county medical society automatically becomes a member of the Arkansas Medical Society and of the American Medical Association, but not a Fellow of the American Medical Association. To become a Fellow of the American Medical Association, this member must make special application and pay to the American Medical Association annual fellowship dues of $7.00, which includes a subscription to The Journal of the American Medical Association. Only fellows may register and take part in the annual sessions of the Association.

Only by fellowship does a physician contribute financially to the activities of the national association. No doubt a large number of the members of the Arkansas Medical Society are not fellows because they have not taken the time to make application. For convenience there is printed in the front advertising section of this issue an application blank. You are concerned with the support of the national organization. Assert your interest in a tangible form by applying for fellowship this month.

The American Board of Internal Medicine will hold its next written examination on Monday, February 14, 1938 in various centers of the United States and Canada.

The examination will consist of two sessions of three hours each with the morning session held at 9:00 o'clock A. M. and the afternoon session held at 2:00 o'clock P. M.

The candidates who are successful in this written examination will be eligible to take the practical examination which will be held in San Francisco the Friday and Saturday prior to the opening of the Annual Session of the American Medical Association in June, 1938.

The final date for filing applications for this written examination is January 15, 1938 and all applications should be in the office of the chairman before that date.

For further particulars and application blanks please address:

Dr. Walter L. Bierring, M. D., Chairman,
American Board of Internal Medicine,
Suite 1210, 406 Sixth Avenue,
Des Moines,
Iowa.

FEDERAL CANNABIS REGULATIONS.

The Marihuana Tax Act of 1937 was approved by the Secretary of the Treasury. Every physician who distributes, dispenses, gives away, administers or prescribes cannabis or any of its derivatives is required by the Act to register with the collector of internal revenue of his collection district, obtain an official registration number and pay the required tax. Physicians who come under Class 4 are subject to a tax of $1 each year. Physicians desiring to obtain cannabis must make application to the collector of internal revenue on form 679a (Marihuana). Physicians are required to keep daily records showing the kind and quantity of cannabis used, the name and address of the person to whom it was given and the purpose for which it was administered or dispensed. Records must be kept two years. The refilling of a presciption for cannabis is prohibited.

OBITUARY

J. William Scales, aged 73, died at his home at Dexter, near Pine Bluff, December 4th. A graduate of the Vanderbilt University School of Medicine in 1888, he came to Pine Bluff shortly thereafter and had practiced the specialty of eye, ear, nose and throat there for nearly fifty years. In addition to his honorary membership in the Jefferson County Medical Society and the Arkansas Medical Society, he was a Fellow of the American College of Surgeons, a diplomate of the American Board of Otolaryngology and a member of the American Academy of Opthalmology and Otolaryngology. He was a charter member of the Allen Hearin post of the American Legion, having served as a captain in the army medical corps during the World War. Surviving relatives are two daughters, Mrs. J. D. Hammons and Mrs. John Parse.

SHELBEY BOONE HINKLE, aged 54 years, died in a Little Rock hospital December 5th of a heart attack. Born at Lunenburg, Izard county, April 14, 1883, the son of the late Dr. J. W. Hinkle and Lucy Ross Hinkle, he graduated from the University of Arkansas Medical School in 1915, being professor of obstetrics at his alma mater at the time of his death. He had practiced continuously in Little Rock since 1915, except for his period of service in the World War as a captain in the medical corps. He was chief of the department of obstetrics at Saint Vincent's Infirmary and a member of the staff at the Baptist State Hospital. In addition to membership in the Pulaski County Medical Society, of which he was a past-president, he was a fellow of the American Medical Association and of the American College of Surgeons, a diplomate of the American Board of Obstetrics and Gynecology, and a member of the Central Association of Obstetricians and Gynecologists. He was elected councilor of the eighth district at the 1936 annual session, and chairman of the council at the council meeting which followed that session. Other activities included membership in the Arkansas Consistory, the Mountain View Masonic Lodge and the Little Rock Rotary Club. At the recent session of the Southern Medical Association he was chosen vice-president of the Southern Club of Obstetricians. Surviving relatives are his wife, his mother, a sister and three brothers.

EDWARD TURNER BRAMLITT, aged 83 years, died at his home in Malvern December 18th. Born in Veronia, Mississippi, he received his education at Mississippi College and graduated in medicine from Louisville Medical College in 1876, first locating at his birthplace, later moving to Malvern in 1898. He had remained in active practice there until two weeks before his death when he was injured in a fall. The distinction of being the oldest living member of the Sigma Chi fraternity was his. An organizer of the First National Bank at Mavern and its president, he was also a member of the Malvern Waterworks Commission from its formation in 1917. He was long a member of the Hot Spring County Medical Society, serving as its president for several terms, and was elected to honorary membership in the Arkansas Medical Society at the 1937 annual session. Surviving relatives are his wife, two daughters and a son.

1938 AMERICAN MEDICAL ASSOCIATION MEETING, SAN FRANCISCO

....When San Francisco was selected as the host city for the 1938 Annual Session of The American Medical Association, the profession of this Golden Gate metropolis promptly initiated plans for the comfort, pleasure and entertainment of all who come to that national meeting. A local executive committee on arrangements composed of five members with Doctor Howard Morrow as General Chairman and Doctor Frederick C. Warnshuis as General Secretary, and eighteen sub-committees have been busy since July in developing plans and local arrangement details. Their objectives are the biggest, best, and most memorable annual session in the history of the American Medical Association.

Atlantic City, Kansas City, Cleveland, Detroit, with their known facilities and attractions have been host cities in recent years, and have justified their selection as meeting places. However, and without disparagement, none of them possess the background, the setting, the resources, the history and romance, or the facilities that are found in San Francisco and in the great state of California—the Golden Bear Empire of the Pacific Coast. To reveal these, to extend California's and San Francisco's noted hospitality, and to cause those who plan to attend the 1938 session to experience ten days of profit and pleasure midst the environs of the annual meeting city, is the goal toward which the local profession is pointing.

The local Committee on Arrangements cordially invites the profession of the country to be San Francisco's guests this coming June. Decide now to attend the 1938 American Medical Association meeting and plan accordingly. During the coming months an insight to some of the feature functions will be disclosed, but the final details and program of events will not be revealed until you arrive. You will long regret it if you fail to attend the coming national meeting. Talk it over tonight with the good wife and your professional associates, and join the party of your state members that is coming to San Francisco—June 12th to 17th, 1938.

PROCEEDINGS OF SOCIETIES

The Southeast Arkansas Medical Society met in dinner session with the physicians of Eudora November 15th. The following scientific program was presented: "Tumors of the Breast," Geo. V. Lewis, and "Some Newer Remedies and Methods of Treatment," J. N. Compton, both speakers of Little Rock.

Drs. E. R. Barrett and H. A. Stroud, of Jonesboro, addressed the November meeting of the Randolph-Lawrence County Medical Society.

Craighead-Poinsett County Medical Society has elected the following officers: President, R. H. Willett, Jonesboro; vice-president, J. W. Elder, Harrisburg; secretary-treasurer, H. H. McAdams, Jonesboro, and member of Board of Censors, W. H. Moreland, Tyronza. Dr. J. H. McCurry, Cash, was voted the most useful member of the Society for the year and will receive a gift of medical books.

R. C. Shanlever, Secretary.

Lincoln County Medical Society has elected the following officers: President, R. L. Johnson, Grady; vice-president, G. C. Wood, Grady; Secretary-treasurer, Vernon Tarver, Star City; delegate, Vernon Tarver, and alternate, R. L. Johnson.

The Eighth Councilor District Medical Society met at Little Rock November 24th. Speakers on the scientific program were: Hugh Leslie Moore, Dallas, "Pneumonia in Children"; R. L. Taylor, Conway, "The General Practitioners Relation to Immunization"; D. A. Rhinehart, Little Rock, "The Significance of Calcification within the Lungs", and W. T. Pride, Memphis, "Long Labor and Its Management." A dinner was held at the conclusion of the afternoon session. Officers elected are: Joe Shuffield, Little Rock, president, and Hoyt Allen, Little Rock, secretary-treasurer. The Society will next meet at Lonoke.

The Bowie-Miller County Medical Society met in dinner session at Texarkana November 19th. A motion picture of the uses of radium and a talk on syphilis and gonorrhea by J. N. White were presented on the scientific program.

The Benton County Medical Society was addressed at its dinner session December 9th by F. E. Schmidt, of Chicago, who presented motion pictures on "Pneumonia" and "Pernicious Anemia."

Geo. M. Love, Secretary.

The Jefferson County Medical Society met at the Davis Hospital, Pine Bluff, in dinner session December 6th, electing the following officers: President, A. W. Troupe; Vice-president, C. J. Higinbotham; Secretary-treasurer, John K. Walker; Delegate, J. M. Lemons, and Alternate, W. T. Lowe.

Garland County Medical Society has elected the following officers: President, Gaston A. Hebert; Vice-president, D. B. Stough, and Secretary-treasurer, W. E. Gray.

The next postgraduate study course arranged by the Committee on Postgraduate Study of the Arkansas Medical Society will be held at the University of Arkansas School of Medicine, January 19th and 20th, 1938. Subjects receiving special attention will be pediatrics and genitourinary conditions. A detailed program will be mailed all members later.

The Mississippi County Medical Society has elected the following officers: President, A. E. Robinson, Leachville; Vice-president, J. E. Beasley, Blytheville; Secretary-treasurer, F. D. Smith, Blytheville.

The regular monthly meeting of the Ouachita County Medical Society was held December 8th, at the Parish House of the Episcopal Church in Camden. Program consisted of a combined talk and movie of "The Modern Treatment of Pneumonia" given by Dr. F. E. Schmidt of Chicago. The annual election of officers was held with the following new officers elected: President, Dr. E. J. Byrd of Bearden; Vice-President, Dr. Sam Thompson of Camden; Secretary, Dr. R. B. Robins of Camden; Delegate, Dr. J. B. Jameson of Camden; Alternate, Dr. J. S. Rinehart of Camden.

R. B. ROBINS, Secretary.

Submitting his report on December 11th, Secretary W. J. Hunt makes Bradley County Medical Society the first 100% county for 1938. Officers elected at the dinner meeting held for members and their wives at L. E. Ellison's office December 8th are: President, M. T. Crow; Vice-President, L. E. Ellison; Secretary-Treasurer, W. J. Hunt; Delegate, W. A. Snodgrass, Jr., and Alternate, Rufus Martin.

The Woodruff County Medical Society has elected the following officers: President, E. F. Brewer, Augusta; Vice-President, J. W. Morris, McCrory; Secretary-Treasurer, L. E. Biles; Delegate, L. E. Biles, and Alternate, F. C. Maguire.

The St. Francis County Medical Society met at Forrest City December 17th, electing the following officers: President, Paul S. Lanier; Vice-president, C. N. Bogart; Secretary-treasurer, J. O. Rush; Delegate, J. O. Rush. The Society discussed policies and procedures for 1938 and voted to meet monthly at Forrest City. The agreement with the Resettlement Administration was accepted and J. O. Rush appointed reviewing officer for the Society. The Society will next meet January 14th at 6:30 p. m.

J. O. RUSH, Secretary.

The second Annual Clinical Conference of The Midwestern Radiologists will be held in the Muehlebach Hotel, Kansas City, Missouri, February 11, 12, 1938. The medical profession of the Midwest are cordially invited to attend this meeting. There will not be any registration fee.

Sevier County Medical Society has elected the following officers: President, C. C. Hanchey, De-Queen; Vice-president, B. E. Hendrix, Gillham; Secretary-treasurer, G. C. Kimball; Delegate, J. C. Graves, and Alternate, C. E. Kitchens.

Lawrence County Medical Society has elected the following officers: President, J. C. Hughes, Hoxie; Vice-president, W. W. Hatcher, Imboden; Secretary-treasurer, Chas. L. Tibbels, Black Rock; Delegate, T. C. Guthrie, Smithville; Alternate, J. F. Jackson, Walnut Ridge, and Censor, W. S. Kendall, Strawberry.

Faulkner County Medical Society has elected the following officers: President, W. L. Brittain; Vice-president, G. L. Henderson, and Secretary-treasurer, J. S. Westerfield.

The Sebastian County Medical Society was addressed December 14th by Joe H. Sanderlin, Little Rock, on "The Climacteric." Officers elected for 1938 are: President, A. A. Blair; Vice-president, J. W. Amis; Secretary, L. M. Henry; Treasurer, W. R. Brooksher, and members of Board of Censors, J. H. Buckley and T. P. Foltz.

L. M. HENRY, Secretary.

Over 75 physicians were in attendance at the annual duck dinner of the Arkansas County Medical Society held at Stuttgart December 14th. Speakers were: J. D. Riley, State Sanatorium, "The Diagnosis of Pulmonary Tuberculosis;" D. A. Rhinehart, Little Rock, "Sickness Insurance," and W. R. Brooksher, "Co-operation of the Physician With Organized Medicine."

The Pope-Yell County Medical Society met at Russellville November 25th for the following program: "The History of Dentistry," A. B. Tate, Jr., Russellville, and "Treatment of Disorders of the Endocrines," G. R. Siegel, Clarksville.

The following program was presented to the Ninth Councilor District Medical Society at its meeting held December 7th in Harrison: "Pneumonia and Its Complications," E. E. Glenn, Springfield; "Problems in the Treatment of Intestinal Obstruction," Robert Glynn, Springfield; "Scabies and Impetigo," Geo. F. Jackson, Little Rock; "Present Status of Immunization," A. C. Kirby, Little Rock, and "Fracture of the Wrist and Forearm," F. Walter Carruthers, Little Rock. A dinner was held at the close of the scientific meeting. The Society will next meet in Harrison June 7th, 1938.

Pulaski County Medical Society has elected the following officers: President, R. M. Blakely; Vice-president, S. P. Bond; Secretary, E. H. White, and Treasurer, R. J. Calcote.

PERSONALS AND NEWS ITEMS

"Gastrointestinal Dysfunction," an address by B. A. Rhinehart, Little Rock, before the New Mexico Medical Society, appeared in the November issue of Southwestern Medicine.

W. F. Shearer has been elected vice-president of the Pulaski Heights Lions Club.

F. J. Scully, Hot Springs National Park, has been elected deputy grand master of the Grand Council, Royal and Select Masters of Arkansas.

Ruth Ellis Lesh, formerly of Fayetteville, now located at South Amboy, N. J., is recovering from an injury of the foot sustained during the summer.

BORN—a daughter, to Dr. and Mrs. E. W. Pillstrom, Coal Hill, on November 27th.

John M. Smith, formerly of Morrilton, has located for practice in Orange, Texas.

W. A. Moore recently addressed the Rogers Kiwanis Club on his experiences on a tour of Europe the past summer.

The following have been appointed to the Medical Council of the National Foundation for Infantile Paralysis: H. C. Brooke, Conway; H. L. Brown, Malvern; W. B. Bruce, Helena; W. H. Bruce, Pine Bluff; Thos. Douglass, Ozark; S. M. Gates, Monticello; F. O. Mahony, El Dorado; J. G. Martindale, Hope; M. E. McCaskill, Little Rock; L. H. McDaniel, Tyronza; M. B. Owens, Newport; Orlie Parker, Wabash; B. M. Stevenson, West Memphis; F. Walter Carruthers, Little Rock, and Vernon Tarver, Star City.

Ellery C. Gay recently addressed the Little Rock Kiwanis Club on "Quackery."

I. R. Johnson and T. K. Mahan are constructing a clinic building at Blytheville.

R. T. Smith recently addressed the Men's Class of the First Presbyterian Church, Little Rock, on "Following the Rules."

H. H. Smith, Fort Smith, took a Carribean cruise during December.

Harry Murry has been elected a director of the Texarkana Kiwanis Club.

E. J. Stroud, Jonesboro, is recovering from an ankle injury.

A. F. Hoge recently addressed the Noon Civics Club at Fort Smith.

Frank Vinsonhaler, Little Rock, has been appointed Arkansas chairman of the Fight Against Infantile Paralysis campaign.

B. A. Rhinehart, LIittle Rock, recently addressed the Cooperative Club on "Human Nutrition."

Henry Pace has been elected surgeon of the Eureka Springs camp, Spanish War Veterans.

H. E. Mobley and E. L. Matthews have been elected chief of staff and assistant chief of staff, respectively, at St. Anthony's Hospital, Morrilton.

MARRIED—At Conway, December 30th, Robert L. Taylor and Miss Mary Margaret Adkisson.

B. C. Clark has been elected treasurer of the Lake Village Masonic lodge.

"Angina Pectoris" by F. L. Husbands, Blytheville, appeared in the December issue of The Mississippi Doctor.

R. M. Blakely recently addressed the Doctor's Secretaries Club of Little Rock.

The following have been elected as officers of the City Hospital Staff at Little Rock: Chief of staff, Joe H. Sanderlin; Vice-chief, Randolph T. Smith, and Secretary, F. Walter Carruthers.

Drs. F. E. Baker and A. W. Keith have been elected stewards of the Stamps Methodist Church.

O. H. King recently addressed the district nurses' meeting at Hot Springs National Park.

Val Parmley, Little Rock, was elected Councilor and chairman of the Council, succeeding the late S. B. Hinkle, at a meeting of the Council December 9th.

D. W. Goldstein, Fort Smith, recently visited in Florida prior to attending the Southern Medical meeting.

E. E. Estes, Fordyce, has recovered from a sinus operation.

"Gunshot Wounds in Peace Time Practice," by Randolph T. Smith, Little Rock, appeared in the December Southern Medical Journal.

BORN—A daughter, Martha Lee, to Dr. and Mrs. Euclid Smith, Hot Springs National Park, December 8th.

Speakers before the Independence County Christmas Seal banquet were: J. D. Riley, State Sanatorium; O. J. T. Johnston, Batesville, and V. D. McAdams, Cord.

R. A. Law, Little Rock, has been elected a director of the Men's Club of Christ Episcopal Church.

The annual conference of state health workers in Little Rock, December 9-10th was addressed by W. B. Grayson, Little Rock; W. R. Brooksher, Fort Smith, "Organized Medicine and the Health Department"; W. Myers Smith, Little Rock, "Maternal and Child Health Program in the State"; A. M. Washburn, Little Rock, "Syphilis Control in Arkansas"; C. Roy Williams, Little Rock, "Tuberculosis Control Program in Arkansas"; Doyle A. Fulmer, Little Rock, "The Development of a Malaria Control Program in Arkansas"; W. P. Scarlett, Morrilton, "Maternal and Child Health Program in Conway County"; W. B. Bruce, Helena, "Tuberculosis Control Program in Phillips County", L. L. Fatheree, Blytheville, "Development of a Malaria Control Program in Mississippi County."

Registered at the New Orleans meeting of the Southern Medical Association were: John S. Agar, Little Rock; Hoyt R. Allen, Little Rock; T. N. Black, Hot Springs National Park; W. M. Blackshare, Hot Springs National Park; F. M. Burton, Hot Springs National Park; P. B. Carrigan, Hope; F. W. Carruthers, Little Rock; B. F. Casada, Hot Springs National Park; Allan G. Cazort, Little Rock; C. T. Chamberlain, Fort Smith; M. T. Crow, Warren, J. K. Donaldson, Little Rock; S. W. Douglas, Eudora; C. S. Early, Camden; G. B. Fletcher, Hot Springs National Park; W. N. Freemeyer, Little Rock; W. R. Garrett, Hamburg; W. M. Gibson, Nashville; J. G. Gladden, Harrison; D. W. Goldstein, Fort Smith; W. B. Grayson, Little Rock; C. C. Hanchey, DeQueen; J. H. Hellums, Dumas; J. B. Hesterly, Prescott; C. G. Hinkle, Batesville; S. B. Hinkle, Little Rock; W. H. Horn, Taylor; J. B. Jameson, Camden; O. J. T. Johnston, Batesville; R. L. Johnson, Bassett; C. W. Jones, Benton; H. Fay H. Jones, Little Rock; T. S. Jordan, Taylor; O. R. Kelly, Sheridan; M. J. Kilbury, Little Rock; A. C. Kirby, Little Rock; A. C. Kolb, Hope; F. H. Krock, Fort Smith; Edward Kultgen, Elaine; J. S. Levy, Little Rock; W. T. Lowe, Pine Bluff; Oliver Melson, Little Rock; John Moore, El Dorado; H. E. Murry, Texarkana; E. D. Munn, El Dorado; H. A. Murphy, El Dorado; C. E. Oates, North Little Rock; D. L. Owens, Harrison; Val Parmley, Little Rock; R. Q. Patterson, Little Rock; Sam Phillips, Little Rock; G. W. Reagan, Little Rock; L. D. Reagan, Little Rock; C. C. Reed, Little Rock; D. A. Rinehart, Little Rock; W. F. Robins, Ozan; A. E. Robinson, Leachville; T. T. Ross, Little Rock; Martin Russell, El Dorado; J. H. Sanderlin, Little Rock; D. V. Smith, Huttig; H. T. Smith, McGehee; J. M. Smith, Smackover; R. T. Smith, Little Rock; J. E. Stevenson, Fort Smith; D. B. Stough, Hot Springs National Park; Alvin Strauss, Little Rock; J. A. Summers, Little Rock; H. S. Thatcher, Little Rock; E. I. Thompson, Little Rock; C. K. Townsend, Arkadelphia; H. King Wade, Hot Springs National Park; A. M. Washburn, Little Rock; Floyd Webb, Blytheville, and S. J. Wolfermann, Fort Smith.

J. W. Ryburn has been elected worthy patron of the Pocahontas Eastern Star lodge.

A. G. Henderson, Imboden, is spending a winter vacation in Miami, Florida.

RANDOM THOUGHTS OF THE SECRETARY

November 22nd. Reading of Captain Eyston, the British speed merchant, driving a car 311.42 miles per hour, slightly faster than Val Parmley piloted Joe Sanderlin and us to Batesville in a worn-out Ford. For the purpose of comparative speeds, at this rate, we could leave Main and Markham some night at one minute to six o'clock and at six o'clock would be at Levy stuck behind some truck for the rest of the night.

November 23rd. Distinguished by brevity of the speeches, the paucity of medical persons in attendance, and the number of physician's wives left at home because of illness, Sebastian County Medical Society honors the press, who are apparently grateful for even this bit of appreciation.

December 1st. Visiting City Hospital, Fayetteville, and privileged to make rounds with E. F. Ellis who flatters us by asking our opinion on several cases.

December 3rd. Reading in a brochure offering children's books of Richard Haliburton's first book for juveniles. Some one has lost the count.

December 5th. Visiting in Springdale we obtain that long-promised basket of apples for Sophie who replies in creditable verse.

December 6th. Magnificently beautiful is the funeral service held for our friend, Hinkle.

December 7th. En route Harrison for the Ninth Councilor meeting, we consider driving snow and probable hazard of return over icy road too much and retrace our tracks from Gateway wondering just how Geo. Jackson and Walter Carruthers will negotiate their return trip.

December 8th. On this day Euclid Smith confesses to being in a daze when we called him yesterday and phones to seek light on what we said as well as to know his comments. The arrival of Martha Lee to the Smith family is good and sufficient reason for this lapse from the usual orderly and logical sequence of thought of our councilor, but what would we have given to see this man excited! In the evening an honored guest in our own household with remembrances for our natal day, followed by the first complete surprise party of which we have knowledge. Sufficiently surprising to find us as the recipient in semi-dress, the guests arriving but split seconds ahead of our contemplated sojourn in the tub. Convinced that life does not begin at forty, or even ten, but with the present moment always.

December 10th. Belatedly we learn that "dinner" in Fayetteville means noon, so we miss a good turkey meal.

December 14th. Seated with a group of fine fellows we do justice to another of those celebrated duck dinners of the Arkansas County Medical Society. Yet, the major conversational topic seems to be the election of that crusading medico, Sterling Bond, to office in the Pulaski County Medical Society. And some are so unkind as to intimate that he has at last supported a winning ticket. Well, 94 votes from 60 members present is our idea of bringing in the late precincts.

December 15th. With the usual aggressiveness, Hoyt Allen sends us a book review by special delivery. That it reached us at 9:00 a. m. instead of midnight happens to be the fault of the mail service.

December 17th. This day we hear a sermon in the remark of the child, cast away in a shoe box at birth, cared for in an orphans' home for all her years, who said, when told that she might get a new pair of shoes for Christmas, "Oh, no, only poor children get shoes for Christmas." A remark which certainly makes light of our ideas on any lack of worldly goods.

INSTRUCTIONS TO THE SYPHILITIC

A leaflet containing the following information is given to every newly diagnosed case of syphilis at the clinic of Dr. Harold N. Cole in Cleveland:

FACTS ABOUT SYPHILIS

1. What Is This Disease?

The examination and tests which we made show the presence in your blood of a serious disease known as syphilis. The germs of syphilis are carried by your blood to all parts of your body. It is true that some people have syphilis but do not know it until years later. The germ may lie quiet for years and then bring on heart disease,, blindness, paralysis or insanity.

2. What Can Be Done for You?

Our medicines are usually given once a week because they are very powerful. This means that we can put a little of it into your body each week. Syphilis can be cured but not in a week or a month. If syphilis has worked in the blood for years we may have to fight it an equally long time. The person who begins his treatment early and follows it through exactly as our doctors tell him is sure to be cured.

3. Can You Skip Treatments When No Longer Ill?

No! Because improvement never means cured. Soon after you start taking treatments the trouble which brought you to the clinic will go, for the medicine acts quickly on the germs. **But it does not kill all of them.** Therefore, if you miss only a few treatments you run the risk of the germs getting the upper hand once more. Cure of syphilis is like putting out a fire—if some of the sparks are left the fire may start up again.

4. What are the Two Tests?

Everyone who has syphilis needs a spinal test. This is given to decide whether you need a special kind of treatment. We ask you to have this test for your safety, for without proper treatment you run the chance of having incurable syphilis of the brain, which causes paralysis and insanity.

From time to time we will take tests of your blood. This is done for diagnosis only and does not tell us anything about cure. The doctor will tell you when you need no more treatment by examining your body and by counting the number and regularity of the treatments which have been given.

5. What Must You Do to Help In a Cure?

Before your arm treatment eat lightly. When possible go home after the treatment and lie down. After a hip treatment rub the hip gently for three to five minutes. If any of our medicines bother you come in and tell the doctor about it. The medicines will be of most value if you will keep the mouth clean, get plenty of sleep, drink no liquor and come every week.

6. How Is Syphilis Acquired and How Long Is It Contagious to Others?

Syphilis is usually, but not always, acquired by sex contacts. It can be caught accidentally by kissing and from careless people or from those who do not know they have it. It can be transmitted by parents to unborn children. If you had syphilis before your children were born they must be examined to see if they escaped it.

The doctor will tell you if and how long your case is infectious to others. As long as it is infectious you should use your own dishes, scald them thoroughly after using, sleep alone, do your laundry separately and never lend or borrow shaving tools or other personal belongings.

If you know from whom you caught syphilis, or believe someone has caught it from you, it would be a great kindness for you to go to these persons and urge them to be examined for disease.—J. Ohio State Med., issue Dec., 1937.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

Dear Auxiliary Members:

January, the beginning of another year, and my wish for you is that the year will bring much of Health, Happiness and Prosperity to you all.

January also marks the beginning of the last quarter of our Auxiliary year, and, while we are resolving to make this a better year and the world a better place in which to live, I hope that we are also reviewing the Auxiliary work we set out to do last April and that this last quarter will show all our plans accomplished.

It is with great pleasure that I read in the pages of our Journal the great work that is being carried on by the County Auxiliaries over the state. And, on this the beginning of another year, I think it is fitting that we again thank Dr. Brooksher and the Arkansas Medical Society for the generous space allotted us and also to Mrs. H. E. Murry, Press and Publicity Secretary, for her untiring efforts in arranging and sending these items in for publication. This is the one means of keeping the membership informed of the activities of the County Organizations and also of the State Medical Society. Know your Auxiliary.

We have just returned from the Southern Medical Association meeting which was held in New Orleans, the city of romance and history. Due to the fact that we had to return home unexpectedly, I was unable to attend all of the activities and festivities. I did, however, have the pleasure and opportunity of hearing the address of Mrs. Augustus S. Kech, National Auxiliary president, who is a most able and forceful speaker. We hope to have her at our state meeting in Texarkana, and I trust that you will all avail yourselves of the rare opportunity of hearing her address there.

The new officers of the Southern Auxiliary are: president, Mrs. Luther Bach, Bellevue, Ky.; president-elect, Mrs. W. K. West, Oklahoma City; first vice-president, Mrs. T. R. W. Wilson, Greenville, S. C.; second vice-president, Mrs. E. W. Veal, Jacksonville, Fla.; recording secretary, Mrs. E. H. Hargis, Birmingham, Ala.; treasurer, Mrs. George J. Taquino, New Orleans; historian, Mrs. J. W. Warren, New Orleans; parliamentarian, Mrs. M. Pinson Neal, Columbia, Mo.

A full report of the activities and entertainment will be given at the state meeting in April.

Again wishing you a Happy New Year, I am,

Sincerely,

(MRS. CURTIS W.) ROSINA JONES.

Dear Auxiliary Members:

We have entered into our auxiliary year with high hopes and aims to carry on our work through the Committees on Organization, Education and Public Health, Hygeia, and the Ilse F. Oates Student Loan Fund. There are, of course, other committees, but I am sure we all feel the above-mentioned are the most important ones.

Let me say here that the Auxiliary to the State Medical Society could not function were it not for the county auxiliaries, so, upon these organizations depends the greater responsibility of carrying on our work.

I shall endeavor to explain the functionings of these committees: First, Organization. Any county that is unorganized should have the consent of the county medical society before organizing. Write to Mrs. C. E. Kitchens of DeQueen, who is State Organization Chairman, and ask her what date she could come to your county. Ask the secretary of the county medical society for a list of all doctors in good standing, for their wives are your eligible members. Send cards to each doctor's wife on your list, telling them of the meeting. Our chief aim in organization is to promote a feeling of friendliness among the doctors and their wives. Too, we stand in the background of the medical profession in carrying out any program along the lines of Public Health, Public Welfare, and in educating the laity.

Each county or district auxiliary should have an advisory committee consisting of three doctors from the county or district medical society. Do not fail to ask their advice when you feel you are not certain of the ethics of a program on which you might be asked to serve. If a county medical society is so small you feel that a county auxiliary could not be organized, then you should see the Councilor from your district and organize a district auxiliary.

Second: Education and Public Health. This is an important committee and overlaps the Public Relations Committee, so, if your membership is limited, these committees could be put together, thereby carrying out both programs. The Education and Public Health Committee gives to the public all literature sent the auxiliary by the American Medical Association. It takes every opportunity to educate the laity as regards professional ethics and the principles of the medical profession. See that your members are put on all health committees belonging to the various clubs of which they are members. By so doing, you are protecting the ethics of the medical profession on any health program that you may be asked to participate in. Go to all public health agencies such as the Tuberculosis Association, the Welfare Association, the Parent-Tachers' Association, and the Red Cross. Offer to help them in any health program that they may be carrying out at the time. Insist that each member of your Auxiliary have a complete medical examination once a year, for should we not as doctor's wives, set the example for preventative medicine?

Third: Public Relations Committee. In carrying out the Public Relations Program, I feel it is best to proceed along the lines of an open meeting, inviting the public. Have one of your local doctor's speak on a subject in which you feel the laity is interested. For example, this year the Parent-Teacher groups are interested in the fight against syphilis and are asking doctors to speak before their meetings on this subject. Other clubs are interested in cancer control. I am sure that with a little work this meeting would be a success. To our certain knowledge, at no time has the laity taken more interest in all health problems. Under this committee there can be radio talks. A doctor cannot advertise, a wife cannot alone undertake any of these projects, but, as an organization, we can expose quackery and give to the laity the wonderful knowledge the medical profession

has brought to light and teach them the things the profession has accomplished for the betterment of health to mankind.

Fourth: Hygeia is the magazine endorsed by the A. M. A., for the laity as well as the profession. Through the agency of Hygeia advice is given by competent writers on matters pertaining to health and disease. Also, the real truths of medicine are given. On the other hand, Hygeia is to interpret to the layman in simple language information about scientific measures that are used or may be used in the future to prevent and cure disease. We hope the Auxiliaries in Arkansas will place Hygeia in charity centers, schools, libraries, and clubs, also in the home of each Auxiliary member. The chief aim of this committee is to place Hygeia where the public will see it and read it.

Fifth: Ilse F. Oates Student Loan Fund. This fund is raised by county auxiliary members. You can donate to the fund from your treasury or raise the money by entertainment or sales or any way your Auxiliary sees fit. However it is done, each Auxiliary should contribute to this fund. The loans are made to Junior and Senior students. Notes with good endorsement are given to the committee and the student pays back the loan after he is graduated and has begun his practice. I am delighted to say that the young men we have helped so far have paid, or are repaying the loan. What more noble object could we as doctors' wives have than helping a deserving young man to obtain his degree to the most honored of professions?

I hope that I have made the workings of these committees clear and that as each year passes, our Auxiliaries will accomplish more.

Sincerely,

(MRS. J. B.) HATTIE MAY CRAWFORD.

The Washington County Medical Auxiliary met on October 21st at the home of Mrs. Fount Richardson for a regular work meeting. Six members were present at this meeting, and on November 2nd the Auxiliary met at Washington Hotel for dinner with seven members present.

MRS. RICHARD MILLER,
Fayetteville, Arkansas.

The Woman's Auxiliary to the Pulaski County Medical Society met December 15th at the home of Mrs. Pat Murphey, with Mrs. W. R. Bathurst, Mrs. Charles E. Oates, Mrs. Val Parmley, Mrs. M. E. McCaskill, Mrs. Harry Hayes and Mrs. Donald Hayes, co-hostesses. Christmas greens decorated the living room where Mrs. Bryce Cummins presided over a brief business session. Luncheon was served from the dining table which was laid with a lace cloth and centered with a holly wreath and red tapers. Assisting in the dining room were Mrs. Cummins, Mrs. J. B. Crawford, Mrs. W. A. Snodgrass and Mrs. Parmley. Mrs. W. R. Richardson was in charge of the program. She gave a talk on the origin of Christmas customs and led in the singing of Christmas carols assisted by Mrs. Pirnique at the piano.

BOOK REVIEWS

A Textbook of Medicine: By American Authors. Edited by Russell L. Cecil, A.B., M.D., Sc.D., Professor of Clinical Medicine, Cornell University Medical College; Associate Attending Physician, New York Hospital, New York City. Associate Editor for Diseases of the Nervous System: Foster Kennedy, M.D., F.R.S.E., Professor of Neurology, Cornell University Medical College; Director, Department of Neurology, Bellevue Hospital, New York City. Fourth Edition, Revised and Entirely Reset. 1614 pages with 42 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $9.00 net.

The fourth edition of Cecil's, "A Textbook of Medicine," is a revision of previous editions, carefully and logically arranged. Many new subjects have been added and older ones revamped. There are 140 contributors, each of whom has written about some phase of medicine in which he is particularly interested. This composite presentation by instructors in some of the prominent medical schools of the nation, and by attending physicians to some of the leading hospitals of the country, has been made adaptable to the needs of the medical student. While it is primarily a textbook, comprehensive, sound and complete, the busy practitioner will find it a ready reference, neither tedious nor laborious, yet adequate for his immediate needs. If is so compact that the physician can well spend his limited time in carefully scrutinizing the contents of the article from which he seeks information. For instance, on lobar pneumonia, on the diseases of circulation and on the diseases of the blood-forming organs. Brevity, clarity, and precision are characteristics which impress the reader.

Mental Therapy: Studies in Fifty Cases. By Louis S. London, M. D., Formerly Passed Assistant Surgeon (R), U. S. P. H. S.; Medical Officer, U. S. Veterans Bureau; Assistant Physician Central Islip State Hospital, Central Islip, New York, and Manhattan State Hospital, Wards Island, New York. Two volumes. Pp. 1101. Price $12.50. New York: Covici-Friede, 1937.

The author has reviewed fifty cases of mental disease or mental mal-adjustment. A psychiatrist might read this with some interest, but probably with very little profit. Abnormalities of sexual make-up are stressed throughout and many pages are used describing technique. The book can be of no value to the general practitioner and of very little, if any value, to the psychiatrist.

Manual of Clinical and Laboratory Technic. By Hiram B. Weiss, A. B., M. D., F. A. C. P., Associate Professor of Medicine, College of Medicine, University of Cincinnati, Cincinnati, Ohio; and Raphael Isaacs, A. M., M. D., F. A. C. P., Associate Professor of Medicine, Assistant Director of the Thomas Henry Simpson Memorial Institute for Medical Research, University of Michigan, Ann Arbor, Mich. Fifth Edition, Reset. 141 pages. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $1.50 net.

This small volume should be a very good reference book for the intern because it is not only compact in size but in subject material also. The more common laboratory procedures are given, and to this, the fifth edition, have been added newer laboratory procedures.

Medical Urology. By Irvin S. Koll, B. S., M. D., F. A. C. S., Attending Urologist, Michael Reese Hospital, Chicago. Pp. 431. 92 illustrations and 6 color plates. Saint Louis: C. V. Mosby Company, 1937.

This is a text on urology discused from the medical standpoint, which will be of particular value to the general practitioner. Discussion of the surgical aspect of urology is omitted. The book is well illustrated with some hundred illustrations. The discussion of gonorrhea in both sexes and complications of this disease conditions are of particular merit. A widespread study of this text would lead to a marked improvement in the treatment of the average case of gonorrhea. The chapter on ulcerative lesions is also of great value. While the reviewer does not agree with the author in all particulars, he does feel that this book is a wise investment of the time necessary to study it.

Practical Proctology. By Louis A. Buie, A. B., M. D., F. A. C. S., Head of Section on Proctology, The Mayo Clinic; Professor of Proctology, The Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota. 512 pages with 152 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $6.50 net.

"Doctor Buie in this book has presented the old and the new in a most interesting and fascinating as well as practical manner." This concise comment from the pen of Charles H. Mayo expresses neatly the general scheme of "Practical Proctology."

"The business of education," states the author, "is to increase the fitness and aptitude of men by increasing the resources which they possess." Doctor Buie has succeeded admirably in his scholarly and practical approach for accomplishing that very objective—to increase the resources for general practitioners of proctology. To him we are grateful.

Proctologists, who have felt a need for a book relating in lucid style the advanced and modern developments in their field, will welcome this unusually simplified, orderly and practical presentation of experience gained by Dr. Buie at The Mayo Clinic during the ten-year period of January 1, 1925, to December 31, 1934.

The book is presented in nineteen chapters which range wide in scope. Outstanding throughout their entirety is the concise and orderly manner of presentation so infrequently found in books of comparable detail. Unusually clear and direct photographs and drawings, some in color, adequately supplement the text.

The anatomical description is not only complete but also very well organized. Preoperative and postoperative care is clearly described including diet and treatment of the wound. An interesting handling of the subject matter concerning types of anesthesia, their advantages, disadvantages and the ones most commonly used is of especial interest. All of the pathological conditions of the anus and colon are clearly defined. And last, the final chapter dealing with dietary formulas and prescriptions achieves a new high in respect to quick reference.

If I should be asked to state in one sentence my opinion of the book, it would be that "Practical Proctology" fulfills a definite vacancy on the library shelf for the practitioner interested in quick reference to detailed authoritative information in its most practical application.

Synopsis of Genitourinary Diseases. By Austin I. Dodson, M. D., F. A. C. S., Professor of Genitourinary Surgery, Medical College of Virginia; Genitourinary Surgeon to the Hospital Division, Medical College of Virginia; Genitourinary Surgeon to Crippled Children's Hospital, etc. Second edition. 112 illustrations. Pp. 294. Price $3.00. Saint Louis: C. V. Mosby Company, 1937.

The second edition of the Synopsis of Genitourinary Diseases is the most complete and compact handy reference book on urological conditions that I have ever read. This book deals with the essential facts connected with urology in such a satisfactory manner that it can readily be grasped by a medical student, and also be valuable to the general practitioner as a quick reference in urology from the least important to the most significant.

Each chapter in this little book is pleasant and enlightening to the reader. Many of the newest and most satisfactory instruments are illustrated by diagrams and described in detail.

Personally, I would like to recommend to all physicians, regardless of their specialty, this little, quick reference book on urology.

Mentality and Homosexuality by Samuel Kahn, B. S., M. A., Ph. D., M. D., formerly on the Psychiatric Staffs of Kings County and Kings Park State Hospitals, New York; New York County Penitentiary, and Sing Sing State Prisons, New York; Associate Attending Neurologist at the City Hospital and Central Neurological Hospital, New York; Instructor in Psychiatry and in Education, New York University; Chief Resident Psychiatrist of Gallinger Memorial Hospital; Clinical Professor of Neurology and Psychiatry at Georgetown and Head of the Department of Psychology, Commerce University of the South, Atlanta, Georgia. 249 pages. Meador Publishing Company, Boston, Massachusetts. Price $3.00.

While acting as psychiatrist to the Department of Correction of New York City, the author has spent considerable time and effort in the study of Homosexuality, studying the males at New York County Penitentiary and the females at the Women's Workhouse. After a comprehensive study he draws the following conclusions:—

1—Homosexuals are not insane people and in general they are not mental defectives—They are to be classified as moral defectives and constitutional psychopaths.

2—The male and female homosexuals seem to have a transfer of the secondary sexual characteristic and to a lesser extent, also the primary sexual characteristics.

3—Homosexuality has no relation to general education, nor even to special education.

4—He estimates that there are from 100,000 to 500,000 active or passive homosexuals in New York City.

5—He gives detailed factors to be considered in making a diagnosis of homosexuality.

6—Also the factors to consider in formulating a prognosis in any given case.

7—Treatment is taken up under—(1) Prevention, (2) Other methods.

8—Suggests further researches to be made with Homosexuals.

This scientific study throws considerable light upon a subject very much in the dark and arouses sympathy for a class of patient usually scorned as degenerates unworthy of help.

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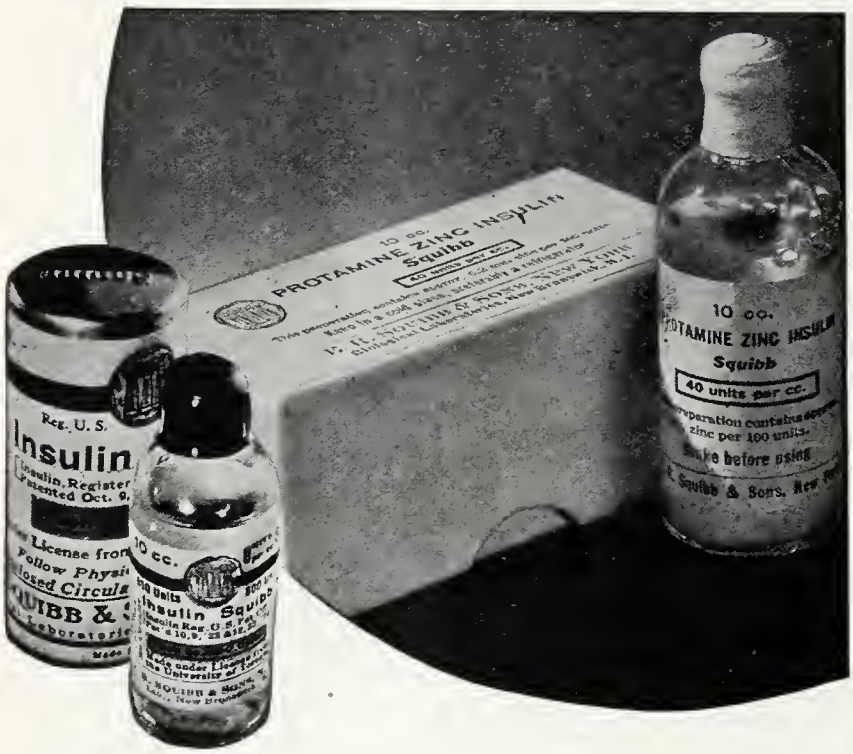

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PERITONITIS: ITS RECOGNITION AND TREATMENT*

CHAS. GORDON HEYD, B. A., M. D., F. A. C. S.†

The clinical picture of a patient dying of peritonitis is almost the same regardless as to the original source of infection. Today the most outstanding cause of fatal peritonitis is acute, gangrenous perforative or suppurative appendicitis. The reaction within the abdominal cavity to the presence of an infectious agent is to utilize to the fullest extent the normal functional properties of the peritoneum.

The anatomical topography of the abdominal viscera may determine the point of localization of an exudate and also may determine the outcome. Clinical observation from time immemorial has demonstrated that in the majority of cases of infection and physical contamination of the pelvis from the tubes or ovaries is not associated with a lethal termination. The ascending, transverse and descending colons, by their anatomical position, determine three main fluid levels, or fossae, within the abdominal cavity. In perforations of the gastroduodenal zone, fluid may pass by means of the transverse and right paracolic fossae to the right lower quadran and simulate acute appendicitis.

For many years many efforts have been made to determine the exact mechanism of death in peritonitis. It has been alleged that the absorption of a single, overwhelming dose of the toxic products of infection was the death-producing factor; a second contention assumed that the death was due to the absorption of the enterogenic toxins contained within the paralytic intestine, and more recently the idea has been expressed that "the approximate cause of death from suppurative peritonitis is intestinal obstruction. The fatal dose of poison is usually absorbed from the intestine above an obstruction and not from the peritoneal cavity." (Handley.)

Vernon C. David's statement "the major problem in peritonitis does not concern itself with the development of septicemia" is indubitably correct. The primary problem in peritonitis is the prevention and treatment of intestinal obstruction. In a chemical sense intestinal obstruction is characterized by the rapid loss of water, an increase in the non-protein nitrogen and the urea nitrogen of the blood and a decrease in the blood chlorides. The clinical picture of peritonitis—the anxious, alert expression, the Hippocratic facies, the evidence of dehydration, the purposeless, continuous and effortless vomiting, with a constantly increased tachycardia, the elevation of temperature—are clinical symptoms parallelling the blood chemistry.

Orr and Hayden have indicated that experimental animals with high jejunostomy have all died in from two to five days with changes in blood chemistry similar to those found in high intestinal obstruction, and furthermore, that drainage of the lower ileum within six inches of the ileocecal valve does not produce similar disturbance. Therefore, "simple" low enterostomy does not prevent the typical changes in the blood which occur in general peritonitis. The administration of a solution of sodium chloride does prevent these typical changes when given in sufficient quantities.

Peritonitis must always be assumed to be a complicating or secondary condition and usually a terminal event. It means an infective process, involving some portion of the abdominal cavity and viscera. It is characterized, unless relieved by adequate treatment, by a progressive extension and sequential involvement of other portions of the abdominal viscera.

Every case of peritonitis begins as a local lesion and from this point spreads as the result of various agencies to other and remote portions of the abdominal cavity. Appendicitis stands first in the etiology of peritonitis, and is followed by gall bladder infections, pelvic disease, and perforation of the gastro-duodenal zone. If the response of the peritoneum to infection con-

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sists in the throwing out of a plastic exudate which binds the adjacent loops of small intestine together, into a fixed intestinal and omental barricade, the final result must be the development of intestinal obstruction. Handley goes so far as to state that there arises in the peritonitis from "acute appendicitis the development of an 'ileus duplex'." This mechanism in varying degree would account for the obstipation, the abdominal distention and the retrograde peristalsis evidenced in the continuing and purposeless vomiting.

The approach of an infective agent to the serosa is characterized by a throwing out by the adjacent endothelial cells of a transudate. This thin, yellowish fluid is nature's response to the irritation of the peritoneum. It is followed very shortly by an exudation with white blood cells and the fluid becomes somewhat milky-white and in the beginning is ordinarily sterile and protective. A little later the coils of small intestine or large intestine in the immediate vicinity of the infection become paralyzed and and are bound together by a fibrinoplastic lymph material. This mechanism is essentially protective for it seeks to wall off or to throw up barricades against the spread of infection. It is in this stage that most of the cases of peritonitis are seen by the attending surgeon. From these initiatory pathological changes there may be a progression of events in the following sequence: (a) an increase in the severity of the pathological reaction: (b) an arrest of the infectious process by walling off: (c) a resolution and a subsiding pathological process: (d) a breaking through of the barriers of the local peritonitis and the development of a progressive spreading, diffuse or so-called general peritonitis. Infection is spread within the abdominal cavity largely by the mechanical or physical characteristics of the abdominal viscera. These are (1) the alternate rising and falling of the diaphragm creates a pump-like or siphonage current: (2) the normal lymph current along the upper and under surface of the omentum or along the lateral paracolic fossa toward the upper abdomen: (3) the peristaltic movement of the intestine itself: (4) the mass or volume movement of the intestine itself: (5) the effect of gravity and posture upon the part of the patient.

Death occurs in peritonitis from (a) toxemia—the result of peritoneal absorption: (b) intestinal obstruction, either in the form of adynamic, ileus, or a dynamic ileus: (c) septicemia, and (d) the complications—pulmonary, cardiac, exhaustion and pyemia.

The clinical consideration of peritonitis embraces three phases: (1) diagnosis and pre-operative treatment: (2) the operative treatment, and (3) the postoperative treatment. The severity of the condition is directly proportional to the amount of absorption from the peritoneum and the treatment resolves itself into measures directed toward modifying the degree of absorption and to correst intestinal obstruction when and if it intervenes. The outstanding surgical or medical considerations are: to keep the peritonitis local; to prevent its becoming spreading or general in type; to bring a spreading peritonitis into condition of local peritonitis.

Surgical intervention in peritonitis has gone through many phases of evolution, from the earlier days of doing nothing to a second phase when the therapy consisted of a laparotomy with aspiration and lavage of the entire intra-abdominal cavity. A third phase considered the physiology of peristaltic rest and peritoneal absorption and consisted of rest and starvation, plus adequate and timely surgical intervention.

By far the most active agent in changing a local peritonitis into one of the spreading character is the use of cathartics or laxatives in the presence of abdominal pain. If one should select any rule for guidance in the case of suspected peritonitis it would be "obtain and promote peristaltic rest." By peristaltic rest is meant the more or less complete cessation of peristaltic movement of the intestine. By far the simplest way to obtain peristaltic rest is to prevent absolutely the taking of anything by mouth. This applies with particular force against the taking of any food, even water, and the absolute withholding of any laxative or any cathartic.

The effect of food, or even water, taken into the stomach is to stimulate intestinal peristalsis and a segment of small intestine that may be quietly wrapped around a diseased area in the neighborhood of a perforated appendix is by the very movement of peristalsis displaced and moved to some other non-infected area of the abdomen. The result is the spreading of an infection over the omentum, along the mesentery and from coil to coil of intestine. If this mechanism obtains upon the taking of only food products and water, how much more magnified is the peristaltic movement induced by salts, laxatives or castor oil.

It has been found that an icebag applied to the abdomen tends to inhibit peristalsis whereas the hotwater bottle tends to stimulate peristalsis. Furthermore, the application of an icebag to

the abdomen brings subjective relief but tends to prevent the local hyperleukocytosis essential for protection. Fauntleroy has demonstrated that cases of acute appendicitis treated with icebags show a general leukocytic count of about 4000 per cubic milimeter less than those that were not treated. It has been found that a quarter of a grain of morphine is an effective antiperistaltic, producing almost complete cessation of intestinal movement anywhere from four to six hours.

After a certain number of coils of intestine have become inflamed or infected there develops what is the single, most outstanding death-producing factor in peritonitis—the development of intestinal obstruction. There is ordinarily a varying degree of abdominal distention but in the protective mechanism resorted to by the peritoneum to prevent the extension of the inflammatory process coils of intestines become acutely angulated, bound down to one another and mechanical obstruction ensues.

It was early discovered that the rate of absorption varied with different localities within the abdomen and it has been an observation since time began that pelvic infections other than the parametrial infections of the puerperium were ordinarily not lethal. With some degree of assurance it was assumed that the higher the location of an infection within the abdomen the more rapid the peritonitis and the greater the mortality. Hence, it was assumed that the rate of absorption from a peritoneal cavity could be influenced by the posture. George R. Fowler demonstrated that by elevating the patient so that the head was at least from 35 to 45 degrees elevated from the horizontal absorption would be less rapid and therefore the patients would ward off or protect themselves from a too rapid or lethal inundation of the circulation with the toxins. Experience showed that this was a protective measure and the Fowler position for peritoneal infections is now almost universally applied in the treatment of peritonitis.

The next step in chronological sequence in the treatment of peritonitis was contributed by a number of observers but given official status by Ochsner who suggested that in a case suspected of having peritonitis absolutely nothing should be given by mouth, and that the patient should be maintained in the Fowler position, and the so-called "rest and starvation treatment" instituted. The acceptance of this rational form of therapy produced results yet the mortality remained excessively high by reason of the inability of the rest and starvation method to prevent the development of the more seriously complicating factor, viz., the mechanical obstruction of the bowels.

Murphy "revolutionized the whole treatment of peritonitis." In a paper read before the British Medical Association at Toronto in 1906, and which today is still a classic of surgical pathology and surgical thinking, he added two noteworthy additions to the treatment of peritonitis. The first—institute surgical drainage—"get in quick and get out quicker," and secondly, the maintenance of water balance by proctoclysis.

In reading over the post-mortem protocols in papers dealing with the treatment of peritonitis one is particularly impressed by reading "there was little drainage from the enterostomy tube."

The ancient Hippocratic dictum,—ubi pus ibi evacuo,—was one of the salient points of the Murphy idea. The presence of pus is lethal when the products of an infection are retained under pressure and the precise and quick and accurate method of relieving pus pressure is by the institution of surgical drainage. It is by no means necessary that the pathological organ should be removed, or that the entire pathological zone should be subjected to surgical exposure. Surgical intervention in peritonitis rests upon the simple procedure of instituting drainage to the site of the infection and to the relief of intestinal obstruction. No lavage or "wiping away" of lymph or undue handling of intestines should be attempted. Furthermore if the patient is to receive nothing by mouth, it becomes necessary to maintain an adequate degree of water in the tissues and in the circulation.

It is quite obvious that with the lack of water by mouth and the increased loss of water by fever and vomiting there results increased concentration of the toxins in the blood. This in turn impairs the eliminative function of the kidneys.

Murphy suggested that the rectum and colon could be utilized for the absorption of fluid and he recommended the giving by rectum after the drop method of huge quantities of normal saline, up to five or even more quarts of water per day.

It was found that the rectum not only tolerated the introduction of fluids but that the absorption was so rapid that it became possible to so load the vascular system with water as to produce an hydremia. The first beneficial effect would be to dilute the toxins already present in the circulation. In the second place a further therapeutic effect was obtained in that it was

possible to reverse the peritoneal current and to actually cause the peritoneum to be a secreting membrane instead of an absorbing membrane.

The clinical fact that peritoneal cases with intra-abdominal drainage can take more fluid by rectum than cases without drainage would seem to lend confirmation to this. It was readily apparent that the taking of so much salt was, per se, dangerous, and it was observed that edema over the shins occasionally occurred and infrequently an edema of the lungs with hydrothorax resulted from a too great intake of salt. Accordingly, the normal saline for proctoclysis was replaced by ordinary tap water, especially after Trout had demonstrated that plain water was more readily absorbed, was better tolerated in the rectum and the patient required less water to satisfy thirst after proctoclysis was discontinued than when saline was employed.

Further additions to the treatment of peritonitis came from the field of chemistry and were evolved from a study of the physiological functions of the liver. It may be said that the protection of an individual from abdominal infection and abdominal surgery is dependent upon the liver being able to function in the presence of abnormal absorption and diminished "tissue" water. The great role of sugar-dextrose—in protecting body proteins, in allowing for the more adequate and more ample function of liver, became apparent; hence, various strengths of dextrose solutions were added to the fluid to be given by rectum.

Human life may be said to depend upon an adequate and precise adjustment of the water-chemical balance. Rowntree states that the total of all secretions poured into the intestinal tract varies from 7,500 to 10,000 c.c., an amount of fluid more than twice the total blood volume. Orr has demonstrated the outstanding importance of dehydration, hypochloremia and acid-base balance in preoperative and post-operative treatment and indicates that while an animal may lose 40 per cent. of its body weight in glycogen, fat and protein without death, a water loss of 10 per cent. is associated with serious complication, while a loss of 20 to 22 per cent. of water invariably brings about death.

NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL

WATER AND CHEMICAL BALANCE

Department of Surgery

History Number .....

Name ..... *Ward* ..... *Date of Admission* .....

Weight .....

	Date										
INTAKE (in cc.)	Mouth										
	Rectal Retained										
	Infusion										
	Clyses										
	Total 24h. (blue ink)										
OUTPUT (in cc.)	Urine										
	Stool (estimated)										
	Skin Loss (estimated) *										
	VOMITUS or Tube Drainage (save sample)										
	Total 24h. (red ink)										
	SUMMARY (if + blue ink) (if − red ink)										
	Glucose (in grams)										
(Indicate in red ink)	6000 cc.										
	5000 cc.										
	4000 cc.										
	3000 cc.										
	2000 cc.										
	1000 cc.										

Remarks. Infusion Reactions. Chills— moderate, severe.

* For each degree of temperature allow 300 cc. for extra skin loss.

FIGURE 1.

The water-therapy, so far as the chemistry of the patient is concerned, must consider: (1) the maintenance of adequate fluid—water intake: (2) the maintenance of a normal chloride content in the blood. A continuance of these two factors will maintain kidney function and prevent an increase in the non-nitrogen protein and the urea nitrogen of the blood. A water balance sheet may be predicated upon the minimal demands for water intake: (1) water loss is occasioned by water lost from the skin—insensible perspiration: this represents a water loss of 1500 c.c. per diem: (2) water loss through the lungs:

this represents a water loss of approximately 500 c.c. per diem: (3) urinary water loss—this must be placed at a minimum of 55 c.c. per diem: (4) water loss through increased metabolism—a minimum of 300 c.c. of water for each degree of fever about 100°F.: (5) water loss through the bowels: (6) water loss through vomiting or from gastric drainage. Water loss through the bowels, in peritonitis, will be practically nil owing to the abdominal distention and obstipation.

A minimal per diem requirement for water cannot be less than 300 c.c. and if the amount of water intake falls below the minimal requirement there will occur a failure of the elimination of kidney water, as the loss of water from the skin and the lungs is obligatory and preferential. What is erroneously interpreted in postoperative conditions as a failure of kidney function is due to the body maintaining its preferential water loss—that is, that water loss by the skin and lungs at the expense of the urinary water. With the falling of urinary water below 500 c.c., with or without vomiting, there is an increase in non-nitrogen protein and urea nitrogen in the blood. If to this is added loss of water and essential chlorides by vomiting, then hypochloremia is induced and alkalosis impends.

In order to represent the water balance mechanism we have utilized a chart which graphically represents at any time the level of water metabolism. A rise in water intake will in general be followed by an increased urinary output and will betoken an improvement in the clinical condition of the patient.

We may therefore summarize the treatment of peritonitis as follows: (1) an accurate anatomical diagnosis of the site and origin of the infection: (2) adequate measures to restrict the infection to a local manifestation and to prevent the extension to a general peritonitis: (3) early surgical intervention: (4) absolutely nothing by mouth: (5) The Fowler position, either by angulation of the patient or by angulation of the bed: (6) the maintenance of adequate water balance —minimal of 3,000 c.c. daily over and above the amount lost by vomiting or Levine tube drainage—(a) by proctoclysis, (2) by hypodermoclysis, (c) by phleboclysis; (7) an adequate maintenance of dextrose intake—(a) by rectum; solutions containing 4 to 10 per cent. dextrose, (b) by intravenous method; from 4 to 10 per cent. solutions of normal saline when volumes of 800 to 1000 c.c. are given; from 20 to 40 c.c. of 50 per cent. dextrose solutions when only dextrose is given: (8) the use of the Levine tube intranasally for complete emptying of the stomach: (9) in the presence of vomiting and to counteract hypochloremia and alkalosis, the giving intravenously of hypertonic saline solutions, 2 to 4 per cent. in quantities of 200 to 500 c.c., or with 10 c.c. of 1 to 1500 solution of sterile Hydrochloric acid: (10) physiological rest of the cerebrospinal nervous system by morphine or its derivatives, after the diagnosis has been made and laparotomy performed.

TABLE I.

TABULATION OF TREATMENT OF PERITONITIS

Preoperative OPERATIVE Postoperative

1. Nothing by mouth—Ochsner "Rest and Starvation."
2. Gastric drainage—indwelling nasal Levine tube.
3. Fowler position—at least 35°.
   (a) Angulation of bed
   (b) Angulation of patient
4. Morphine for pain or restlessness.
5. Prevent dehydration—amount of fluid lost by stomach + 3000 cc per diem
   Protoclysis, Murphy
   Tap water + 10% glucose — 500 cc q. 8 h.
   Hypodermoclysis
   N/10 saline — 500 cc q. 8 h.
   Phleboclysis
   N/10 saline + 5% glucose — 1000 cc — Following intravenous solutions to be normal saline or distilled water.
6. Prevent hypochloremia and alkalosis.
   Replace fluids and chlorides lost in vomitus.
   Intravenous method
   (a) 2-4 per cent. hypertonic saline
   (b) 10 cc of 1:1500 sterile Hydrochloric acid.
7. Surgical intervention
   (a) Early operation for primary focus, with drainage.
   (b) Operations for intestinal obstruction.—Handley.

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The second annual New Orleans Graduate Medical Assembly will be held at the Roosevelt Hotel in New Orleans on March 7, 8, 9 and 10, 1938.

For over one hundred years, New Orleans has been recognized as one of the nation's greatest medical centers. During that century it has been growing progressively greater in importance. Being the second port of the United States, its geographic situation has made it a crossroad of the shipping of the western hemisphere. As a consequence, while its general health is second to none in the United States, it was but a natural sequence that an opportunity would be afforded to see a variety of disease conditions only possible in a port of its size. An additional reason has been the fact that Charity Hospital has always been a mecca to which have come sufferers as well as students of medicine. Those who were ill have realized that in this medical center the facilities for relief would be found. Physicians and students in a like manner have always known it as a center of medical knowledge with unsurpassed clinical material.

The success of the New Orleans Graduate Medical Assembly at its initial meeting last year exceeded the most optimistic expectations of its sponsors. This year eighteen physicians of national and international reputation, representing the principle branches of medicine, have accepted invitations to be guest speakers.

A cordial invitation is extended to the physicians of the State of Arkansas to attend the Assembly.

CRANIO-CEREBRAL INJURIES: MANAGEMENT OF THE ACUTE CASE*

HARRY WILKINS, M. D.
Oklahoma City

The appalling number of automobile accidents throughout the country each year and the nature of modern industrial work with a high incidence of trauma warrants the attention of the medical profession as a whole in an attempt to better understand the principles of treatment in cases of trauma.

Trauma to any part or organ of the body may result in complications that produce death. They may be less severe and yet leave the individual a cripple and an economic loss to society rather than an asset. In addition there are those unmeasurable factors, pain, suffering and distress that accompany the prolonged convalescence from injury.

Trauma to the head with injury to the cranium and its contents occurs all too frequently in our present day accidents with fast moving vehicles and modernized machines. With such an injury we are confronted with all the usual factors and complications of injuries to other structures of the body and in addition certain special factors based on the anatomical arrangement and physiology of the cerebral contents. It is my purpose to give you what I consider the practical principles involved and suggest application of these principles in the management of the acute head injuries that each of you will have occasion to treat from time to time.

The brain, a vital organ, is encased in a rigid structure, the skull, and supplied with nourishment, fluids and oxygen by way of the blood stream entering through the arteries at the base or in the basalar region. Although trauma to any portion of the body is followed by extravasation of blood into the tissues and subsequent edema, special attention to these conditions is necessary in dealing with injuries to the brain. Swelling of the brain, encased as it is by a rigid covering, produces pressure which results in disturbed circulation sometimes reaching a degree that is incompatible with life. The solid matter within the skull making up the brain, the vessel walls, cranial nerves and membranes is a fixed volume. Fluid both interstitial and within the ventricles and subarachnoid spaces is variable in quantity. Likewise the circulating blood varies in quantity. It has been pointed out by Fay that with an increase in interstitial fluid, that is when cerebral edema occurs, the other variable, the circulating blood, is decreased. Obviously an anoxemia accompanying such a condition not only causes widespread damage but may reach a state where death ensues. Our special efforts then must be directed toward prevention of and relief from anoxemia due to cerebral compression.

Nature has provided an excellent covering consisting, from the surface inward, of the scalp, the pericranium, the skull, the dura and the lesser meninges. Naturally any one or all of these may or may not be damaged from an injury that does irreparable damage to the brain. The reverse is also true and interruption of continuity of the covering may occur without serious damage to the brain.

In being called to see the patient suffering from a cranio-cerebral injury I feel that it is our primary duty to consider the patient as a whole. We should then attempt to meet the requirements of the organism rather than confine our attentions to a single organ or structure such as the head. Emergency treatment then consists of rapidly summing up the general condition of the patient to better enable us to apply a more rational therapy. Move the patient as little as possible. Of course the patient should be moved to a protected place, either the home or hospital, but should not be transported long distances in the initial stage of the post-traumatic state. Following this, measures to combat shock are put into effect. These will vary with the situation confronting us but usually the measures to combat post-operative shock or shock produced by injury to other structures are applicable with one exception; that is regarding the use of morphine which will be discussed later. External heat, stimulants, particularly caffeine—sodium benzoate, fluids intravenously and subcutaneously are to be given when required. Open wounds should have a sterile dressing to aid in controlling hemorrhage and measures to dehydrate the patient are to be postponed until recovery from shock. Temporary care of fractures in the extremities is warranted only in so far as found necessary in preventing increase in shock. Obviously with few exceptions, x-rays of the skull should be put off until the initial shock has been controlled.

Continuous observation should accompany the preliminary therapeutic measures and with a response from the shock when present a more careful neurological examination gives one the benefit of analyzing the damage to nerve structures. Repeated examinations will reveal the

* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 14, 1937.

progression of symptoms and allow a more rational application of subsequent measures. It is in this period that one should observe particularly for signs of massive hemorrhage that may require evacuation by emergency craniotomy. This is the period when the increase in edema may occur rapidly enough to suggest the presence of a massive hemorrhage. Careful analysis will usually serve to differentiate these conditions and save valuable time in instituting the proper therapy.

The phenomena of a rapid-rise in intracranial pressure is fairly characteristic. The systolic blood pressure increases and the diastolic increases but to a lesser degree, resulting in an increase in pulse pressure. A progressive slowing of the pulse with subsequent loss of consciousness and finally impaired use of the extremities on one side of the body or the appearance of pathological motor pathway signs complete the picture. This condition is a result of rapid massive bleeding as from the middle meningeal artery that will result in a fatality from compression if the clot is not removed. Of course this necessitates an operative procedure as an emergency measure.

Following the recovery from the initial shock x-ray plates may be made, lacerations of the scalp closed and fractures of the long bones should be reduced and adequately splinted or fixed. Tetanus anti-toxin may be given and measures to prevent increasing intra-cranial pressure from cerebral edema should be instituted.

Most of the operative procedures necessary in the treatment of injuries to the head are carried out in the early part of this second phase. Lacerations of the scalp, even though small, warrant careful cleansing of the surrounding scalp by shaving and scrubbing with soap and water. Alcohol is in my opinion the best antiseptic to use in the wound. Chemicals of more caustic type interfere with healing. Closure of the lacerations in layers without drainage should be carefully attended to only after complete debridement.

More extensive damage to the covering of the brain may be handled in the same way but with preparation for a more extensive operative procedure. Bone fragments are elevated to permit debridement of the subjacent brain, control of hemorrhage and careful and complete closure of the dura by direct suture or by fascial transplant. Bone fragments are then replaced if they can be thoroughly cleaned with soap, water, saline and alcohol. The scalp is then closed as in simple laceration.

Massive hemorrhage, for example from rupture of the middle meningeal artery, or an acute massive subarachnoid or subdural hemorrhage is handled only by evacuation of the clot and control of the bleeding point or points. These are usually adequately handled through a classical subtemporal decompression opening. The more frequent but less rapid in occurrence is the subdural hematoma. Its symptoms are insiduous in development, rarely showing changes of blood pressure or pulse, but may cause pupillary inequality and slightly xanthochromic spinal fluid and vague mental symptoms and transient motor signs, all following a more or less trivial injury. It is not infrequent that the condition persists from several weeks even to a few months before symptoms reach a degree to warrant surgical consideration.

The final indication for operative treatment is the depressed fractures that are not compounded. Of course very slight depressions do not require elevation. Those of more than just an appreciable degree should always be cared for following the termination of shock. A laceration of the dura or brain beneath the depressed area would alone warrant operative correction. The possible irritation of the irregular mass of depressed bone is likewise sufficient reason for correction of the depression. These steps aid materially in the prevention of post-traumatic Jacksonian convulsions which may not occur until years later.

Methods to reduce edema of the brain and lower intra-cranial pressure of a dangerous degree have been introduced in the past few years to supplant the old operative procedures for decompression. Hypertonic solutions producing an osmotic process to reduce interstitial fluids have been administered by the intravenous route, by the oral route and as retention enemas. For a more even, continuous and prolonged effect the administration of a saturated solution of $MgSO^4$ as a retention enema as often as every three to four hours produced the best results. This does not induce the vomiting or general gastro-intestinal irritation that a similar drug produces when given by mouth. It has in addition the advantages of removing the fluid from the body rather than merely shifting it into the blood stream where it is held temporarily and then lost to the tissue within a short time. As an adjunct to this measure glucose in fifty per cent solution may be given intravenously every three to four hours following the termina-

tion of shock. It produces a more rapid loss of interstitial fluids but is less stable and a compensatory rise of pressure may occur if not fortified with retention enemas.

The patient's position in bed is important. After shock has been relieved or following operative procedures elevation of the patient's head and shoulders to a semi-sitting position and frequent shifting from side to side may not only aid in preventing pulmonary stasis but also encourages venous drainage from the head and decreases or prevents an increase in cerebral edema.

Subsequent to the period of shock, fluids and food must be supplied in quantities sufficient to maintain nourishment and proper metabolism. If the patient is able to take liquids and food by mouth, that is sufficient. If not intravenous glucose, saline subcutaneously or liquids by nasal tube should be given. We ordinarily limit such fluid intake to from 1500 cc. to 2500 cc. per day depending on the patient's size and condition. Removal of fluid by retention enemas should be carried on during this period.

The general comfort of the patient is important. Attention to the body as a whole may reveal a full bladder, gaseous distention of the bowel, a previously undiscovered fracture of a rib or long bone, or irritated skin, that proper care will correct and leave the patient quiet and in a resting state. Sedation may be necessary when measures to reduce intra-cranial pressure and correction or irritation from other points in the body have failed to quiet the patient. We prefer to use the milder sedatives and they are used sparingly. Morphine is distinctly contra-indicated since it not only masks the symptoms of intra-cranial pathology but actually, as shown by experiment, raises intra-cranial pressure. It is also a very dangerous drug in this condition because of its depressing effect on the respiratory center. Death from cranial injuries most frequently result from respiratory failure. I have seen respiratory depression develop to become the most distressing factor confronting the physician after morphine had been given. Codeine is much less depressing and often affords relief, particularly when used in conjunction with dehydration.

Spinal punctures are unnecessary as an aid to reducing intra-cranial pressure. There is danger of medullary failure from compression of the medulla in the foramen magnum when this procedure is resorted to in the presence of marked pressure. It does have its place, however, and that is for the removal of bloody spinal fluid. Within some forty-eight to seventy-two hours following an injury crenation of red cells in the fluid occurs liberating the chemical constituents of the cells. These chemicals produce an inflammatory reaction identical with that of meningitis but without the presence of organism. Repeated punctures with gradual drainage of the contaminated fluid gives a fairly rapid improvement in the clinical symptoms. The conservative means of lowering the intra-cranial pressure is as a rule sufficient if used over a period of forty-eight hours or more to prevent untoward effect of spinal puncture.

Rest is one of the most important steps in caring for cerebral trauma. This will allow the maximum reparative process to take place. The length of time for the patient to remain at rest in bed is more or less arbitrary and must be governed by the patient's progress. Invariably the patient feels well enough to leave his bed before he should be permitted to do so. A minimum of two to three weeks bed rest should be insisted upon even in the minor injuries and longer periods advised depending on the degree of injury.

Contusions and lacerations of the brain occurring with injury may be sufficient to cause death. This is particularly true if the contusion is located in the basal area or in the brain stem. Less extensive changes respond to the reparative functions of our system if complications such as massive hemorrhage, cerebral edema and compound fractures or infections are prevented by the methods outlined above. Extensive changes in the cortex may improve to give a normal or near normal function or may persist as areas of degeneration with symptoms referable to the area involved. At a later date such changes may result in cortical irritation as evidenced by convulsions. The presence of convulsions in the post-traumatic case may result from disturbance in intra-cranial fluid equilibrium and therefore does not positively signify actual cerebral damage.

COMING MEDICAL MEETINGS.

Sectional Meeting, American College of Surgeons, Houston, Texas, February 2-4.

Clinical Conference of Midwestern Radiologists, Kansas City, February 11-12.

Mid-South Postgraduate Medical Assembly, Memphis, February 15-18, 1938.

New Orleans Graduate Medical Assembly, New Orleans, March 7-10th.

Medical Association of the Missouri Pacific Railroad, Houston, Texas, March 17-18.

Arkansas Medical Society, Texarkana, April 18-20, 1938.

American Medical Association, San Francisco, June 13-17, 1938.

SELECTING THE CASE FOR CESAREAN SECTION*

FOUNT RICHARDSON, M. D.
Fayetteville

I have been stimulated to prepare a few remarks on the subject of "Selecting the Case for Cesarean Section" by three things. First, there is the variance of opinion among physicians gathered to discuss such a case in consultation; second, the appearance in journals for the past year of many statistical articles prepared from surveys made by the Children's Bureau of our national government; and third, and the most impelling hope that with a careful study of the factors in each case, there may be fewer women who die following that operation.

Some of the articles I have seen in the past few months merely quote figures, then draw conclusions, as does Lynch in a recent issue of Surgery, Gynecology and Obstetrics. Others are interested in the particular indications or contraindications for section, while all are interested in reducing the high mortality which now obtains. Bland of Philadelphia, in a discussion of Lynch's paper, seems to think that the difficulty lies in technical measures and he says: "The chief factor, I think, in conspiring to thwart a conservative attitude regarding the operation, is its apparent technical simplicity, and for the unwary, herein lies a delusion and a snare." Both these men urge us to do fewer cesarean sections.

In the study of several such articles it has occurred to me that what most of these authors are seeking is not that less surgery be done, but that the indications and the contraindications of the operation be more fully understood. I am reminded of an eminent physician who was confronted with an error in diagnosis. His reply was that the signs and symptoms were all there but that he had drawn the wrong conclusions.

In this paper you will not be told to do fewer cesarean sections but you will be advised to more clearly determine the reasons for performing any given section, and that you inform yourselves in detail of the reasons for not performing a given section. J. K. Quigley, in the New York State Journal of Medicine states: "The high death rate is due, not so much to errors in operative technique as to the poor judgment used in the selection of cases for operation." I have a few figures to give in this paper and will confine my discussion to the selection of the case. It is well to say in the beginning, that if every case could be an elective one, i.e., could be performed at an early and proper time, the mortality percentage would be materially lowered.

There are few conditions which are so easily recognizable as the indications for section. The first of these is pelvic contraction. These cases have been arbitrarily divided into two classes. absolute and relative. By absolute is meant those cases which are so contracted that there is no possible chance for delivery of a live baby through the normal channel. In these cases it should be remembered that there is no use in giving a test labor, which merely weakens her and increases the operative mortality. By relative contraction is meant those cases with the border-line pelves which tax the judgment and skill of the obstetrician. A young woman whose pelvis is of border-line proportions, could be expected to deliver an average-size baby if there was no malpresentation, while in an elderly primipara, or one with some debilitating disease, such a pelvis would demand elective section.

Closely allied to the contracted pelves are other dystocias, namely: Fibroids which obstruct the outlet, vaginal stenosis, cervical cicatrix, et cetera. These constitute an absolute indication for section. I have seen a case of such dystocia presented by an aneurysm of the uterine artery, although I have seen no reference to any similar case in the literature. Ovarian tumors may be so situated as to be a cause of dystocia, as may malignant growths of the cervix.

The third group of indications are the malpositions of the placenta, or its premature separation, placenta praevia, and ablatio placenta. Central placenta praevia is an absolute indication for section, while a marginal implantation may sometimes be as easily handled by rupture of the membranes. Danforth puts cesarean fourth in a list of procedures designed for treatment of marginal placenta praevia. Premature separation, while usually an indication for section, can, if infection or its equivalent, frequent examination has supervened, be treated by drawing the baby's thigh down to control hemorrhage by pressure.

General debilitating disease, such as heart disease which is not compensated, pulmonary tuberculosis, chronic nephritis (not eclampsia), and severe nervous disorders, are listed by most authors in a great group which are best treated by elective section.

* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 13, 1937.

There are two other indications for cesarean which are in no way related. First, elderly primipara in whom a test labor shows no progress and second, prior section. On the latter, the concensus of opinion is now that if the low cervical operation is used, there is little danger of rupture, and the same is true of classical section if healing was by first intention and no considerable amount of scar tissue is present. I am sure all of us have looked in on uteri which have been previously opened, and have seen absolutely no scar in some of these. Quigley states that if the convalescence from the first operation was a stormy one, with fever and other evidences of infection, the proper procedure is early section.

In any case which appears doomed to a high forceps, elective section is, in my opinion, justifiable. There is more safety for the baby and certainly less morbidity for the mother.

Among the list of indications sometimes used are three others, mentioned only to be decried. The first is a rigid cervix, without other true indication. Not knowing what to do is an indication for consultation but not for section. Nor is enthusiasm for surgery.

Concerning the contraindications, no higher death rate is seen than in cesareans performed in infected cases. A case in which delivery has been attempted is not a case for section. Repeated examinations are not permissible if the obstetrician is to elect cesarean. Nor should such a procedure follow a single examination unless the woman and the examining hand have been properly prepared. Let it be remembered that the physician himself can, by unwise examinations, spoil a case for section which might otherwise have been safe.

The length of labor is a consideration; the mortality curve rises sharply as the time in labor lengthens. Rupture of the membrane is a relative contraindication, but as the time increases, it becomes an absolute one. One author believes that twenty-four hours after rupture of the membrane, the life of the child should be sacrificed rather than to subject the mother to the extremely dangerous section.

Eclampsia is considered by many as a contraindication, although most of us feel that it is an absolute necessity in some cases. Mortality statistics report an over-all mortality of some 33 per cent in cases so operated for eclampsia. These figures do not agree with a small series of 50 cases collected at the Fayetteville City Hospital, where the mortality rate was 14 per cent. However, we are coming to believe that eclampsia should be otherwise treated, preferably in that manner used by the French school: chloral, bromides and absolute rest, because they respond in better percentages to this treatment than to cesarean section. A dead baby is a contraindication for section with the possible exception of placenta praevia where bleeding continues. Otherwise, there is no reason for subjecting the mother to an additional hazard when the life of the child is no longer a consideration.

I have nothing to say about the choice of operation or its technique other than to say that the low cervical section, called laparo-trachelotomy, is fast becoming the preferred procedure. It is commonly employed in cases where there is a possible chance of infection.

In closing, I ask you to remember that in elective cases the mortality runs as low as one per cent, while in cases seen late in labor, the death rate is distressingly high. My plea is not merely for a decrease in cesarean sections, but for a proper selection of the case from a study of the indications and contra-indications of the procedure. Let it be used where it offers the greatest safety to the mother and child, keeping in mind that it is better to have at the end, a childless mother, than a motherless child.

HISTORY TAKING IN GENERAL PRACTICE*

S. W. DOUGLAS, M. D.
Eudora

The most important single factor in the practice of medicine is the diagnosis. The most important single factor in the diagnosis is a carefully taken history. It is usually conceded that acurate diagnosis is impossible without a form of written history. More than half the physicians whom I have contacted on this question admit to having no adequate method of clinical records.

The most of those who keep no records complain that it is too much trouble. Others, of course, are just too lazy and do not care. It is rather embarrassing to have a patient to return to you in three or four weeks and you cannot recall his complaint or what you did for it. Your patient cannot help noting that your mind is a blank because you really look blank. It is so much better for the physician and the patient if all you have to remember is the name and know exactly where you can put your hand on his record. It then pleases him when you inquire of every detail of his complaint. With

* Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 13, 1937.

the record before you, you can inquire into every item of his illness. Is the headache better? Has the dizziness improved? Are you still short of breath? Are you sleeping well?

The taking of a proper history is impossible without some adequate system and that system is the reason for this paper. The system must not be cumbersome, yet it must be replete. It must be simple and require but a minimum of time to make the entries. Words and abbreviations must stand for whole sentences; the symbols plus and minus will answer most of the questions. The data must be ample to cover the most prevalent diseases, yet simple and concise.

In making the examination, we should encourage the patient to give a complete history of his illness. Make notation on the record of important symptoms as dizziness, frequent bowel action, cough, etc., and make these the basis of further examination. No questions are asked until the patient has finished his story, when we begin at the top of the record and more particularly investigate the leading symptoms mentioned by the patient. You will note that we have grouped the objective findings at the bottom of the page. This is logical and makes for convenience. On the reverse of the sheet will be found space for the diagnosis, the treatment, and entries for subsequent visits.

The charge account is placed in the upper right hand corner, and if cash is forthcoming, mark it paid. The sheet is then filed in an alphabetically arranged folder or file. At the end of the month the charge accounts are transferred to the ledger, disregarding the paid accounts. I prefer a loose leaf ledger arranged alphabetically. When the ledger account is paid, the sheet is merely transferred to a paid file.

When posting is done at the end of the month, all records are transferred from the daily folder to the monthly file, still arranged in alphabetical order. They accumulate in this file at the end of each month until the end of the year when they are removed and tied together.

This gives a permanent record of all the work, easily accessible for future reference.

This outline may be modified to suit your individual needs. I can recommend it as practical, simple, time-saving, yet extremely efficient. The cost of printing is small and there is no copyright.

Date____ Name____ Address____
Order____ Where Work____
Lead Symp____ $____
H L S____ Cause____ Same____ $____
First Symp____ Sud____ Grad____ $____
Med Taken____ Relief____
In Bed____ Work____ Part Work____ Why Quit Work____
Pain____ Kind____ Radi____ Const____
Worse____ Time____ Relief____
Head A____ Part____ time____ Cause____ Verti____
Tender____ Swelling____
Weak____ Dyspnea____ Cause____ Wheeze____
Appetite____ Diges____ H. L. Aft Eat____ Cause____
Belch____ Nausea____ Cause____ Vom____ Kind____
Fever____ AM____ PM____ H L____ Onset____ Time da____ Alt____
Go Off____ Sweat____ Chill____ Chilly____ Ache____
Bowel A Daily____ Medici____ Kind of A____ Macus____ Pain____
Piles____ Itching____ Fistula____ Hernia____
Urine____ D N____ Amt____ Color____ Pain____ Dribble____
Sp G____ Reac____ Albu____ Sug____ P____ B____ C____
Cough____ H L____ L T____ Lu____ Th____ Time Worse____
Amt____ Color____ Blood____ Pain Where____
Skin____ Erup____ Kind____ H L____ Itch____ Pain____
Eat Reg____ Amt____ Kind____ Chew____
Sleep Sound____ Hrs____ Keep Awake____
Teeth____ Gums____ Tongue____ Throat____ Eyes____
Nose____ Ear____ Glands____ Thyroid____ Hair____
Nervous____ Jitters____ Mind____ Deposit____
Age____ Occupa____ M S W____ Wt Maxi____ Date____ Now____
Previous Illness Lung____ Thro____ Rheum____ Mal____
Gon____ Syph____ Operat____ Accident____
Habits Tobac____ Alco____ Work Hrs____ Exerc____
Worry____ Home Life____ Sex____
Fam Hist Heart____ Kid____ T B____ Syph____ Obesit____ Ment____
No Ch____ Dead____ Youngest____ Miss____ Labors____ Fever____
Peri Reg____ Length____ Amt____ Pain____ Leuko____
Pulse____ Reg____ Kind____ Arteries____
Heart Mur____ Locat____ Regu____ Apex____ B P____
Lung Aus____ Percus____
Abdo____ Stom____ Liver____ Spleen____
Knee Reflex____ Eye Re____ Sight____
Blood____ Hemoglo____ Leukocyt____ Malaria____

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EDITORIAL

LUMP SUM PAYMENTS UNDER SOCIAL SECURITY

Because of intimate personal relationship with the families of employed persons at the time of death of the worker, physicians have an opportunity to explain some of the less-understood provisions of the Social Security Act. In this act the federal government has set up a vast old-age insurance system for the workers of this country, the essential purpose of which is to provide these workers with an assured and regular monthly income when they retire from regular employment because of age.

Just at this time there is need for a better understanding of the lump-sum payment since the monthly income payments will not become effective until January 1st, 1942. In explanation of the lump-sum payment, it may be stated that any individual who after 1936 has worked in an included employment, i. e., had paid social security tax as a covered employee, will receive a lump-sum payment equal to 3½ per cent of his total wages if he fails to qualify for Federal monthly old-age retirement benefits because his total wages are less than $2,000, or because his employment has not fallen in at least 5 different calendar years between December 31, 1936, and his sixty-fifth birthday. This payment exhausts his old-age benefit rights, but if he dies before receiving the lump-sum payment, the amount due him will be paid to his estate. Thus, it will be seen that if any employee in the included classifications dies before attaining the age of sixty-five, there will be paid to his estate this 3½ per cent of his total wages.

Physicians may well bear this provision of the Act in mind when attending an employee in his last illness and death, advising the family of their rights. As is the case with new innovations, information is slowly received by the general public and the physician may thus aid the family in time of need to obtain this sum due them.

Further information relative to the social security act and the filing of claims may be obtained from the offices of the Social Security Board located at Little Rock, Fort Smith, Pine Bluff, Jonesboro and Texarkana.

THE COUNTY SOCIETY SECRETARY

Manifold and onerous are the duties and responsibilities of that "jack-of-all-trades," yet verily a master of many, the county medical society secretary. Physicians seem to lack appreciation of the work which these men perform

from week to week throughout the year for the betterment of organized medicine. Reading of the minutes of the previous meeting may seem to be the sole visual evidence of their efforts but correspondence on file in the office of the state secretary attests in eloquent fashion to the trials and disappointments of this strangely neglected group within the profession. Must a meeting place be arranged? Is there a program to work up? Are there reservations to be made for the dinner session? Will notices be mailed to the members? Is there a conference with a social or welfare group? Has friction developed in the ranks? Does a committee meet? Does the state or national organization seek local information? The secretary of the county society is the man who handles the situation and we can truthfully confirm the fact that he does it well, ignoring the complaints and bickerings which may accompany some slight miscarriage of an efficiently-planned arrangement, all the while acquiring experience whereby he hopes that this same failure will not repeat itself and steadfastly devotes no inconsiderable portion of his time in attending to all the details which a unthinking membership places upon his shoulders. Finally, it falls upon him to collect the membership assessments. Every reader can from a bitter personal experience testify to the annoyance with which he pursues his personal collection problems. Your secretary has no desire to accumulate collection knowledge and wholly dislikes the task imposed upon him. You, and all of you, can lighten his load by sending a check for your 1938 membership assessment NOW, not waiting for your fellow-worker to personally solicit this payment. Save your secretary this additional work; relieve his burden in part!

YOUR 1938 ASSESSMENT OF MEMBERSHIP IS DUE THIS MONTH!

HONORARY MEMBERSHIP

County medical societies which contemplate submitting names of members for election to honorary membership at the 1938 session are urged to take action now in order that ample time may be afforded to check records of qualification. Attention is directed to the fact that the following requirements must be met: (1) The member must have reached the age of 65 years, (2) he must have been a member in good standing for the preceding 15 consecutive years, (3) he must have been elected to such honorary membership in his county medical society, and (4), he must be in good standing for the current year, i.e., the 1938 assessment of membership must be paid. At the 1937 session, the House of Delegates voted to further require that members under consideration for this honor must have paid their assessments prior to March in each year beginning with 1938.

THE FRANKLIN COUNTY CORRESPONDENT

Jan. 7, 1938

Dear Sir:

Complying with your request of Jan. 5th.

The Franklin County Medical Society held a meeting on the regular date, December 14th, 1937, at Dr. Gibbons' office, Ozark, with Gibbons, Porter, Post, Hansberry and Douglass attending, President Porter in the chair. We had some trouble to keep Dr. Gibbons in attendance as he was being called out constantly. Once he was away 45 minutes and returned in an hour. Then he turned down several calls to see a sick nigger who was about to die. Doc finally got there and pulled him through. We stayed in session and elected the following officers for 1938:

President, J. L. Post, Altus; Vice-President, W. H. Gibbons, Ozark; Secretary-treasurer, Thos. Douglass, Ozark; Delegate to State Society, Thos. Douglass, and Alternate, W. C. Porter.

Dr. W. H. Bollinger was the first to send in his dues. Dr. Porter and Douglass paid dues—three to date.

We hope to roll up a membership of seven for this year. We voted to have our annual banquet some time soon. We are a going concern—but not doing much.

Yours very truly,
THOS. DOUGLASS, Secretary.

OBITUARY

GRAYSON E. TARKINGTON, aged 42, formerly of Hot Springs National Park, died January 12th at Albuquerque, New Mexico, as the result of a head injury received in a fall. Born at Oakland, Louisiana, December 25th, 1895, he came to Arkansas in childhood and was educated in the schools of Hot Springs National Park, graduating from the University of Maryland School of Medicine in 1917. He entered the Army Medical Corps during the World War and returned to practice in Hot Springs in 1919. He moved to Albuquerque several years ago and at the time of his death he was a member of the New Mexico Medical Society, a fellow of the American Medical Association and of the American College of Physicians and a member of various Masonic Orders. Surviving relatives are his wife, his mother and two brothers.

GEORGE P. SANDERS, aged 64, died at his home in Stephens January 15th. Born at Glenville in 1873, he graduated from Memphis Hospital Medical College in 1904. He had engaged in the practice of medicine at McNeil and Stephens for 38 years. Surviving relatives are his wife, a son and three daughters.

PROCEEDINGS OF SOCIETIES

Conway County Medical Society has elected the following officers: President, A. L. Goatcher, Plummerville; Vice-president, E. L. Matthews, Morrilton, and Secretary-treasurer, W. P. Scarlett, Morrilton.

The annual banquet session of Franklin County Medical Society was held at Ozark January 18th with over 30 physicians in attendance. Speakers were: M. E. Foster, Fort Smith, "Kidney Infections," and W. F. Adams, Fort Smith, "Hypothyroidism."

Randolph County Medical Society has elected the following officers: President, J. W. Ryburn, Pocahontas; Vice-president, J. E. Smith, Reyno; Secretary-treasurer, Wm. O. Loftis, Pocahontas; Delegate, M. A. Baltz, Pocahontas, and Alternate, J. E. Smith.

The Fifth Councilor District Medical Society met in dinner session at El Dorado January 11th for the following program: "Blindness," K. W. Cosgrove, Little Rock; "The Early Recognition and Management of Tuberculosis in Childhood," A. C. Shipp, Little Rock; "Problems of the Small Town Surgeon with Exhibition of a Few Rare Specimens," A. S. Buchanan, Prescott, and 'Treatment of Peptic Ulcer," Joe B. Wharton, Jr., El Dorado. Officers elected are: President, W. P. Cooksey, Magnolia; Vice-President, Joe B. Wharton, El Dorado, and Secretary, R. C. Kennerly, Camden.

The annual banquet session of Sebastian County Medical Society was held January 11th with 75 physicians in attendance. In addition to entertainment features, J. W. Amis, retiring president, and A. A. Blair, incoming president, made addresses.

Independence County Medical Society has elected the following officers: President, O. L. Bone, Newark; Vice-President, L. T. Evans, Batesville; Secretary-Treasurer, J. B. Askew, Batesville; Delegate, L. T. Evans, and Alternate, Paul Jeffery, Bethesda.

On January 20th, the following county medical societies had reported a 100% payment of membership assessment for 1938: Bradley, Johnson, Madison, Randolph and Sevier.

At the meeting of the Johnson County Medical Society December 20th, the following officers were elected: President, Geo. L. Hardgrave, Clarksville; Vice-President, E. W. Philstrom, Coal Hill, and Secretary-Treasurer, G. R. Siegel, Clarksville. The society was addressed by Robert Hood, Russellville, "Treatment of Bronchopneumonia in Children," and E. J. Haster, Dardanelle, "Modern Treatment of Syphilis." The F. S. A. medical plan was thoroughly discussed and the society voted not to accept the plan as presented because it was considered just another step towards state medicine.

G. R. SIEGEL, Secretary.

Searcy County Medical Society has elected the following officers: President, E. W. Wood, Marshall; Vice-President, J. O. Leslie, Marshall; Secretary-Treasurer, S. G. Daniel, Marshall; Delegate, E. W. Wood, and Alternate, J. O. Leslie.

Prairie County Medical Society has elected the following officers: President, J. R. Lynn, Hazen; President-elect, W. H. Crockett, Biscoe, and Secretary-Treasurer, J. C. Gilliam, Des Arc.

Cross County Medical Society has elected the following officers: President, R. S. Smith, Parkin; Vice-President, J. S. Miller, Parkin; Secretary-Treasurer, T. J. Stewart, and Delegate, A. F. Barr, Cherry Valley.

The Pope-Yell County Medical Society met in dinner session at Russellville January 13th for the following program: "Retroperitoneal Sarcoma," Louis M. Smith, and "Medical Ethics and Finances," J. M. Stafford. Attendance figures for the year 1937 show that the average meeting attendance for the society was 15.3.

ROY I. MILLARD, Secretary.

The Saline County Medical Society and Auxiliary were guests of Dr. and Mrs. E. A. Buckley at Bauxite December 15th. Officers of the Society for 1938 are: President, John W. Ashby; Vice-President, C. W. Jones; Secretary-Treasurer, Thos. C. Watson, and Program and Policy Committee, E. A. Buckley, C. W. Jones and T. E. Buffington.

Thos. C. Watson, Secretary.

Cleveland County Medical Society has elected the following officers: President, W. G. Hancock; Vice-President, A. J. Hamilton; Secretary-Treasurer, A. B. Robertson; Delegate, T. L. Adams, and Alternate, A. B. Robertson.

The Fourth Course of Postgraduate Instruction sponsored by the Committee on Postgraduate Study was held at the University of Arkansas School of Medicine January 19th and 20th with the following guest speakers: C. J. Bloom, New Orleans, Hugh McCullough, Saint Louis, C. E. Burford, Saint Louis, and C. C. Higgins, Cleveland. Other speakers were: Alan G. Cazort, I. J. Spitzberg, A. C. Kirby and Madeline Melson, "Allergy"; Sam Phillips, "The Feeding of Normal Infants"; W. R. Parsons, "Immunization in Childhood"; Charles Wallis, "Interpretation and Evaluation of Tuberculin Tests"; V. T. Webb, "The Management of Infectious Diseases to Protect the Health of the Community"; E. C. McMullen, "The Early Diagnosis of Appendicitis in Children"; J. E. Jones, "The Most Frequent Causes of Vomiting in Infancy and Childhood"; J. N. Roberts, "The Value of Urological Study"; T. Duel Brown, "Diagnosis and Treatment of Urinary Tract Calculi"; H. Fay H. Jones, "The Management of Urinary Tract Infections", and G. W. Reagan, "The Diagnosis and Treatment of Urinary Tract Injuries."

The Greene County Medical Society has elected the following officers: President, R. J. Haley, Jr.; 1st Vice-President, J. A. Dillman; 2nd Vice-President, W. E. Ellington; Secretary-Treasurer, W. M. Majors, and Member Board of Censors, G. P. Bridges.

Washington County Medical Society has elected the following officers: President, Jeff Baggett, Prairie Grove; Vice-President, R. W. Miller, Fayetteville; Secretary-Treasurer, Fount Richardson, Fayetteville, and Delegate, Alfred Hathcock, Fayetteville.

Boone County Medical Society has elected the following officers: President, Ross Fowler, Harrison; Vice-President, Ulys Jackson, Harrison; Secretary-Treasurer, W. L. Watkins, Alpena Pass; Delegate, Ross Fowler, and Alternate, J. H. Fowler.

The Lawrence County Medical Society met January 11th with J. C. Hughes and J. L. Merrell at Hoxie for the following program: Motion picture of cataract and strabismus surgery, M. E. Blanton, Jonesboro, and "Your Hygienic Laboratory," H. V. Stewart, State Board of Health, Little Rock.

CHAS. D. TIBBELS, Secretary.

Monroe County Medical Society has elected the following officers: President, E. D. McKnight, Brinkley; Vice-President, W. H. Martin, Holly Grove, and Secretary-Treasurer, A. S. J. Clarke, Clarendon.

Benton County Medical Society has elected the following officers: President, G. E. Hughes, Siloam Springs; Vice-President, W. A. Moore, Rogers; Secretary-Treasurer, Geo. M. Love, Rogers; Delegate, W. A. Moore, and Alternate, Geo. M. Love.

GEO. M. LOVE, Secretary.

Lonoke County Medical Society has elected the following officers: President, J. F. Brewer; Vice-President, E. A. Callahan; Secretary-Treasurer, O. D. Ward; Delegate, S. S. Beaty; Alternate, F. A. Corn, and member, Board of Censors, F. A. Corn.

O. D. Ward, Secretary.

Crawford County Medical Society has elected the following officers: President, B. L. Bennett, Van Buren; Vice-President, J. M. Stewart, Van Buren; Secretary-Treasurer, O. J. Kirksey; Delegate, S. D. Kirkland, and Alternate, O. J. Kirksey.

Hempstead County Medical Society has elected the following officers: President, G. E. Cannon, Hope; Vice-President, J. E. Gentry, McCaskill; Secretary-Treasurer, Jim McKenzie, Hope; Delegate, A. C. Kolb, Hope, and Alternate, Jim McKenzie.

Little River County Medical Society has elected the following officers: President, P. H. Phillips; Vice-President, E. R. King; Secretary-Treasurer, J. W. Ringgold; Delegate, Herman Castile, and Alternate, P. H. Phillips.

PERSONALS AND NEWS ITEMS

H. O. Walker, Newport, has been appointed a member of the Jackson County Recreation Council.

W. S. Crawford has been elected a director of the First National Bank, Marianna.

Dr. and Mrs. L. L. Scott, Siloam Springs, recently celebrated their thirtieth wedding anniversary.

O. R. Kelly, Sheridan, has been elected a director of the Grant County Bank.

A. J. Hansberry has moved from St. Paul to Ozark.

T. P. Foltz, Fort Smith, served as Sebastian County Chairman for the President's birthday ball.

Geo. M. Love, Rogers, has been elected president of the Benton County Tuberculosis Association.

C. P. Cisco has been elected a director of the First State Bank, Springdale.

E. J. Cruse has been elected a director of the First Banking Company of Black Rock.

The Southeast Arkansas Medical Society was addressed December 20th by S. W. Douglas, Eudora, on "Beginning of Surgery in the United States."

Ralph Weddington recently addressed a Fort Smith P.-T. A. group on "Immunization."

H. H. McAdams has been elected president of the Jonesboro Country Club.

Martin C. Hawkins, Jr., Searcy, was a member and speaker of the Pan-American Medical Association Cruise Congress during January.

J. B. Ellis has returned to Helena after a prolonged vacation in California.

D. W. Goldstein, Fort Smith, attended the organization meeting of the American Academy of Dermatology in Detroit during January.

Drs. M. F. McAlister, Texarkana, A. S. J. Clark, Clarendon, and J. B. Askew, Batesville, are taking the public health course at Vanderbilt University.

Louie Martin has been elected president of the Kiwanis Club at Hot Springs National Park.

B. J. Ivy has been appointed medical director of District 17 comprising the counties of Bradley, Cleveland and Lincoln.

MARRIED—On January 1st at Memphis, Charles T. Chamberlain, Fort Smith, and Miss Frances Goodlett, Nashville, Tennessee.

Jean Atkinson, Manila, visited Missouri and Oklahoma points during the holidays.

A. J. Dunklin has been elected a director of the Searcy Kiwanis Club.

J. K. Donaldson addressed the Little Rock Rotary Club January 6th on "Medico-Economics."

George Atkinson, formerly of Manila, is temporarily located at Weleetka, Alaska.

Raymond T. Smith, Fort Smith, has been appointed Chairman for Arkansas for National Hospital Day.

T. K. Mahan recently addressed the Blytheville Rotary Club on the control of pneumonia.

E. A. Callahan has been elected vice-president of the Citizen's Bank at Carlisle.

A. M. Elton has been elected a director of the First National Bank at Newport.

H. H. Smith recently addressed the Noon Civics Club of Fort Smith.

W. A. Regnier, formerly with CCC Camp, Little Rock, has been transferred to Co. 4734, CCC Forrest City.

J. Lamont Henry, formerly with Fair Park Camp, CCC., Little Rock, has been transferred to Co. 3777, CCC, Friendship.

F. Walter Carruthers, Little Rock, addressed the American Academy of Orthopedic Surgeons during the session in San Francisco, January 16-20th.

Paul L. Day, Little Rock, addressed the Council of Social Agencies January 11th.

J. H. Lamb and G. S. Self have been elected directors of the National Bank of Commerce, Paragould.

W. E. Ellington has been elected director of the Security Bank and Trust Company, Paragould.

A. F. Hoge has been elected director of the City National Bank, Fort Smith.

C. H. Smythe has moved from Glenwood to Stephens.

C. Ray Williams, State Sanatorium, addressed the Methodist Men's Club at Booneville, January 10th.

T. W. Henderson, Augusta, has been appointed a member of the Woodruff County Equalization Board.

Allan Gilbert recently addressed the Fayetteville Rotary Club.

B. L. Ware has been elected vice-president of the Farmers Bank at Greenwood.

Guy Hodges has been elected vice-president of the Twin City Golf and Country Club at Rogers.

W. M. Majors has been elected service officer of the Paragould American Legion post.

E. D. McKnight has been elected director of the Bank of Brinkley.

W. H. L. Woodward and W. R. Felts have been elected directors of the Farmers and Merchants Bank at Judsonia.

C. J. Steed has been elected chairman of the board of trustees and vice-chairman of the board of stewards of the Gurdon Methodist church.

R. O. Norris has been elected vice-president of the Bank of Tuckerman.

S. J. Hesterly has been elected vice-president of the Bank of Prescott.

J. B. Hesterly has been elected a director of the First State Bank at Prescott.

Dr. and Mrs. H. A. Stroud, Jonesboro, visited California and western points in January.

E. A. Bing has been elected president of the Marshall Rotary Club.

R. M. Klemme, Saint Louis, addressed the Pulaski County Medical Society January 10th on "Trigeminal Neuralgia."

RANDOM THOUGHTS OF THE SECRETARY

December 31st. We review the passing year: the happy memories of many pleasant associations, the companionship of good and true friends, the too-few good deeds to which we may lay modest claim, the somber realization that these could well have been increased in numbers with negligible sacrifice on our part, our hopes and aspirations as yet unattained—a beneficient gesture of an all-wise Providence, the whole mellowed by an inner assurance that we have been far more kindly treated than many another in this tumultous world of ours during the past months.

January 1st. Setting forth on a new year, one of promise with many opportunities ahead. May we fully realize these!

January 2nd. Being a pal and a buddy to a young aboriginal with primitive blood-thirsty tendencies, the realization of which is complicated by a stubborn Shetland pony, a youthful desire to hunt tigers as well as to engage in countless frays with denizens of the underworld, desperate bandits, nefarious robbers and other criminals, armed with various weapons and a vivid imagination with which these old eyes have difficulty in seeing alike, the day passes, not without conflicts of mind and body. Jean Atkinson passes through the city finding us engaged in our customary Sunday evening role of drug store cowboy with the young savage, now, for the purposes of obtaining food under civilized conditions, adopting some restraint in his activities.

January 3rd. Pressed into service as an acting secretary to the staff meeting, we find no official relief from hazarding an opinion as to the diagnosis in a detailed case history, losing a marvelous chance to distinguish ourself as one of great clinical ability, rather "busting" as do all others, if that be any comfort.

January 4th. The first blue inclosure from The Journal reaches our desk, C. B. Billingsley sending it along, and these lines will let him know of our appreciation. Our hope is that all county society secretaries see a veritable "blue heaven" this month.

Janury 6th. In our wanderings seeking 1938 dues, we discover that Freer doubtless has more troubles than anyone of our knowledge at the present, that Eberle has acquired a farm in Crawford County, to which he hied forth at high noon today carrying a posthole digger and a keg of nails, terminating our quest with attentive listening to a tale recounted by Buckley, one of the few with whom we must listen and not have the chance to express ourself.

January 11th: On this night Sebastian County Medical Society starts another year in hospitable banquet session. Amis relates with proper pride the accomplishments of the past year while Blair proposes an ambitious program. And many a tale is passed across the festive board.

January 13th. Present for the regular session of the Pope-Yell County Society at St. Mary's Hospital, we first enjoy a good meal, which moves Wolfermann to ask that he be allowed to bring his family down to board for the price. Louis Smith presents a well-worked case, complete with necropsy findings. Stanford actually proposes that this particular county medical society decide on a policy of ethics and economics, acquainting themselves in detail with the various changes in medical economics and set up proper and adequate safeguards for the practitioner. Surely, we can no longer say that our fervent appeals have been ignored. In this society we observe every evidence that they are for one another and intend to preserve all the rights of the private practice of medicine. Joining the ladies at Louis Smith's where there is as usual much shop-talk, enlivened by Mrs. Bob Hood's presentation of her method of treating colds in children, wife of a pediatrician though she is.

RULES GOVERNING THE AWARD OF "THE FOUNDATION PRIZE" OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS, GYNECOLOGISTS AND ABDOMINAL SURGEONS.

(1) "The award which shall be known as "The Foundation Prize' shall consist of $500.00."

(2) "Eligible contestants shall include only (a) interns, residents, or graduate students in Obsterics, Gynecology or Abdominal Surgery, and (b) physicians (with an M. D. degree) who are actively practicing or teaching Obstetrics, Gynecology or Abdominal surgery."

(3) "Manuscripts must be presented under a nom-de-plume, which shall in no way indicate the author's identity, to the Secretary of the Association together with a sealed envelope bearing the nom-de-plume and containing a card showing the name and address of the contestant."

(4) "Manuscripts must be limited to 5000 words, and must be typewritten in double-spacing on one side of the sheet. Ample margins should be provided. Illustrations should be limited to such as are required for a clear exposition of the thesis."

(5) "The successful thesis shall become the property of the Association, but this provision shall in no way interfere with publication of the communication in the Journal of the Author's choice. Unsuccessful contributions will be returned promptly to their authors."

(6) "All manuscripts entered in a given year must be in the hands of the Secretary before June 1st."

(7) "The award will be made at the Annual Meetings of the Association, at which time the successful contestant must appear in person to present his contribution as a part of the regular scientific program, in conformity with the rules of the Association. The successful contestant must meet all expenses incident to this presentation."

(8) "The President of the Association shall annually appoint a committee on Award, which, under its own regulations shall determine the successful contestant and shall inform the Secretary of his name and address at least two weeks before the annual meeting."

JAS. R. BLOSS, M. D., Secretary.
418 Eleventh Street,
Huntington, W. Va.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

The Auxiliary to the Ninth Councillor District Medical Society met at Harrison, December 7th, with Mrs. Lloyd Jackson, President, in charge. Roll call was answered by 12 members from four counties.

Three visitors were present, Mrs. E. E. Glenn, Springfield, Mo., Mrs. E. M. Gray, Mountain Home, and Mrs. Luther Cavaness, Yellville.

New officers for the coming year were elected: President: Mrs. Henry V. Kirby, Harrison; President-elect: Mrs. J. G. Gladden, Harrison; Secretary-treasurer: Mrs. Ulys Jackson, Harrison; Hygeia: Chairman: Mrs. D. K. McCurry, Green Forrest.

Resolutions of respects, regarding a deceased member, Mrs. D. Evans, were read and adopted. Mrs. J. G. Gladden and Mrs. D. L. Owens gave a very interesting report on the Southern Medical Association meeting at New Orleans. The following program numbers were rendered: Reading, Ruth Martin, Harrison; Paper, "What's New in Medicine," Mrs. O. B. McCoy; Reading, Mrs. Luther Cavaness, of Yellville. Tea was served by Harrison members to all members and visitors during the afternoon. A banquet was given for members of medical society and Auxiliary members in the evening.

MRS. D. K. McCURRY, Secretary.

The Woman's Auxiliary to the Washington County Medical Society met November 2, 1937 at the Washington Hotel for dinner.

November 15th the Washington County Auxiliary had a joint luncheon with the Sebastian County Auxiliary.

December 7th the Washington County Auxiliary had a dinner meeting at the Washington Hotel. Mrs. Fount Richardson discussed The Health Magazine, Hygeia.

NELL WALLACE MILLER.

Woman's Auxiliary to the Bowie and Miller County Medical Society met December 10th, at the home of Mrs. T. F. Kittrell. Hostesses were Mrs. Kittrell, Mrs. Joe Tyson, Mrs. Roy Baskett and Mrs. P. H. Phillips of Ashdown, Arkansas. Mrs. N. B. Daniel, president, had charge of the business session. The auxiliary voted to send a cash donation to the Goodfellows fund.

Medical Current Events were led by Mrs. P. H. Phillips and Mrs. Decker Smith gave an especially interesting talk on "The Lure of Legendary Medicine." Reports from the Southern Medical Association meeting in New Orleans were given by Mrs. S. A. Collom, Mrs. Allen Collom, and Mrs. Harry E. Murry.

During the social period, refreshments were served from the decorated dining table, which held an artistic arrangement of red nandina berries, red tapers, and greenery. Mrs. S. A. Collom, Sr., poured coffee and the salad course was served under the direction of Mrs. N. B. Daniel, auxiliary president.

Those present were Mrs. Daniel, Mrs. S. A. Collom, Mrs. Allen Collom, Mrs. T. E. Fuller, Mrs. L. J. Kosminsky, Mrs. Albert Mann, Mrs. H. E. Murry, Mrs. W. Reavis Pickett, Mrs. R. R. Robins, Mrs. Decker Smith, Mrs. E. M. Watts, Mrs. J. F. Williams, Mrs. L. H. Lanier, Mrs. C. A. Lee, and the hostesses.

The Auxiliary to the Sebastian County Medical Society voted January 10 at a luncheon meeting at the home of Mrs. Ruth Moss Carroll to present subscriptions of "Hygiea," American Medical Association publication, to the Girls Club and the Carnegie library for the 1938 year.

Other business transacted included the hearing of routine reports and the election of Mrs. J. W. Redman to membership. Mrs. J. S. Southard, president, presided and also was co-hostess with Mrs. I. Fulton Jones.

Program numbers were piano duets, arranged and played by Nadine and Mavine Lewis. The compositions were, "Ain't Behavin'," "Josephine," and "Emaline."

Present for the meeting were Mrs. Southard, Mrs. Everett C. Moulton, Mrs. Walter Eberle, Mrs. D. W. Goldstein, Mrs. W. F. Adams, Mrs. A. A. Blair, Mrs. M. E. Foster, Mrs. S. J. Wolfermann, Mrs. Raymond Smith, Mrs. H. C. Dorsey, Mrs. Thomas Price Foltz, Mrs. C. S. Bungart, Mrs. B. Wayne Freer, Mrs. S. P. Stubbs, Mrs. W. R. Brooksher, Mrs. I. Fulton Jones and Mrs. W. F. Rose.

Mrs. Rose and Mrs. Raymond Smith will be hostesses for the February meeting.

Mrs. W. F. Rose, publicity chairman, Woman's Auxiliary of the Sebastian Medical Society.

WHAT EVERY WOMAN DOESN'T KNOW—HOW TO GIVE COD LIVER OIL

Some authorities recommend that cod liver oil be given in the morning and at bedtime when the stomach is empty, while others prefer to give it after meals in order not to retard gastric secretion. If the mother will place the very young baby on her lap and hold the child's mouth open by gently pressing the cheeks together between her thumb and fingers while she administers the oil, all of it will be taken. The infant soon becomes accustomed to taking the oil without having its mouth held open. It is most important that the mother administer the oil in a matter-of-fact manner, without apology or expression of sympathy.

If given cold, cod liver oil has little taste, for the cold tends to paralyze momentarily the gustatory nerves. As any "taste" is largely a metallic one from the silver or silverplated spoon (particularly if the plating is worn), a glass spoon has an advantage.

On account of its higher potency in Vitamins A and D, Mead's Cod Liver Oil Fortified With Percomorph Liver Oil may be given in one-third the ordinary cod liver oil dosage, and is particularly desirable in cases of fat intolerance.

There are a few vacancies at present and in prospect for duty with the CCC in this military district: i.e., Seventh Corps Area. This medical service is rendered by Reserve Officers or by civilian physicians, who enter into contract with the Surgeon, Seventh Corps Area. Anyone interested should address the Surgeon, Seventh Corps Area, Federal Building, Omaha, Nebraska.

BOOK REVIEWS

Clinical Reviews of the Pittsburgh Diagnostic Clinic.— Edited by H. M. Margolis, B. S., M. D., F. A. C. P. Contributors: H. G. Schleiter, M. D., C. H. Marcy, M. D., C. C. Mechling, M. D., R. R. Snowden, M. D., L. H. Criep, M. D., G. W. Grier, M. D., and H. A. Anderson, D. D. S. Pp. 552. Price $5.50. New York: Paul B. Hoeber, Inc., 1937.

This is a series of brief expository reviews, 45 in number, covering in wide range, the diabetic, the arthritic conditions, the psychoneuroses, cardiovascular diseases, all of which receive careful attention. The subject matter is well condensed and most readable. The definite conviction is obtained that the authors have well informed themselves before attempting their presentations. A carefully-assembled bibliography accompanies each essay. This is a most satisfactory volume for postgraduate instruction of the physician at his reading convenience.

Crippled Children: Their Treatment and Orthopedic Nursing. By Earle D. McBride, B. S., M. D., F. A. C. S., Assistant Professor of Orthopedic Surgery, University of Oklahoma School of Medicine; Attending Orthopedic Surgeon, St. Anthony's Hospital, Oklahoma City, etc. In colloboration with Winifred R. Sink, A. B., R. N., Educational Director, Grace Hospital School of Nursing, Detroit, Michigan, etc. Second edition. Pp. 379. Illustrated. Price $3.50. Saint Louis: The C. V. Mosby Company, 1937.

The authors have condensed a large amount of material to form an interesting, readable text. The book is written from the nursing point of view and stresses the need for special training of nurses engaged in orthopedics. Recent advances in surgical procedures are included and excellent illustrations are presented. The volume is well-worth reading but is especially valuable for nurses or for the faculties of training schools.

The Cerebrospinal Fluid: By H. Houston Merritt, M. D. Assistant Professor of Neurology, Harvard Medical School; Director of Cerebrospinal Fluid Laboratory, Boston City Hospital; and Frank Fremont-Smith, M. D., formerly Assistant Professor of Neuropathology, Harvard Medical School; formerly Director of the Cerebrospinal Fluid Laboratory, Boston City Hospital. With a foreword by James B. Ayer, M. D. 333 pages with 17 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $5.00 net.

This entirely new work is a splendid addition to any library. It is valuable not only as a quick reference but as a text to be studied diligently by anyone who is interested in general diagnosis. The spinal fluid and the cerebrospinal circulation are covered in a manner that I do not believe has ever before been undertaken. In short, this book correlates all of the accumulated knowledge of the cerebrospinal fluid and cerebrospinal circulation that is known today.

A detailed discussion of the anatomy and physiology of the cerebrospinal circulation is presented as well as the chemistry and pathologic physiology of the cerebrospinal fluid. The chapter on the technic of lumbar puncture and routine examination of the spinal fluid is also noteworthy. The discussion of the cerebrospinal fluid syndromes is exhaustive in its scope and should be of great value to the internist and surgeon alike.

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CLINICAL TYPES OF MASTOIDITIS*

H. W. LYMAN, M. D.†

Infections of the middle ear are caused by many different organisms, the commonest of which are the staphlococcus, the streptococcus, and the pneumonococcus. Each of these types of bacteria causes a definite set of symptoms and a clinical course, which is quite characteristic of that particular organism; and, when these infections invade the mastoid, they again present similar peculiarities. For example, a typical staphlococcic infection of the middle ear is characterized by a steadily increasing pain, elevation of temperature, and leucocytosis. As pus forms in the tympanic cavity, the drumhead bulges, with the greatest prominence, usually in the posterior portion. When the drumhead is incised, or ruptures spontaneously, there is a discharge of frank pus and the clinical symptoms rapidly subside. In streptococcic infections of the middle ear, the course is much more stormy. The upper respiratory infection, from which it extends, is more severe; the ear symptoms occur earlier; the temperature is higher; the patient is more toxic; and the blood picture is significant of a more serious condition. When the drumhead is incised, a bloody serous discharge is released, which, later on, may become frankly purulent because of contamination with staphlocicci. In the pneumococcic infections, especially pneumococcus, Type III, which is identical with the streptococcus mucosus capsulatus of the older otologists, and which is generally the organism referred to when pneumococcic ear infections are mentioned, the progress of the case is still different. The ear symptoms are usually vague and slight; the pain is not severe; and, frequently, the patient complains of it only at night, his chief comment being that the ear feels dull and stuffy. The temperature seldom rises above 99° or 99½° and the leucocyte count does not exceed 8,000 or 8,500. The drumhead loses its natural luster, but often is only partially red, and frequently shows no bulging whatever. Even these symptoms may subside after a few days, and then again recur, and it is often difficult to determine whether the pathological process is increasing or not. In fact, this very uncertainty of the progress of the disease is one of the important factors in its recognition. When such an eardrum is incised, there may be very slight discharge, usually of a bloody, mucoid character, and this not infrequently subsides in a few days and the incision in the drumhead closes, only to be followed by a renewal of the symptoms just mentioned.

These organisms present like characteristics when they invade the mastoid region, and mastoiditis can be similarly grouped into classes. Staphlococcic mastoiditis is that which is commonly spoken of as the classical or coalescent type, and the type most of us have in mind when discussing this subject. The streptococcic infections group themselves into a class known as the hemorrhagic type, and the pneumococcus Type III infections are examples of the so-called masked, or latent, type. Of course, this classification is not absolute and distinct, staphlococcic cases frequently being quite virulent; streptococcic cases may sometimes run a very mild course and may even simulate the latent type; while some pneumococcic mastoid infections are very stormy. However, in most cases the infection "runs true to form," and, if we are able to identify the organisms during the attack of otitis media, we are often able to anticipate its behaviour in the mastoid and estimate the liability to complications in those cases in which the mastoid does become involved.

This leads us to emphasize the importance of making smears and obtaining cultures for microscopic examination whenever the eardrum is opened. This is most easily done by making the smears and cultures directly from the paracentesis knife. Of course, smears and cultures made under these conditions will not be pure; but if nothing but staphlococci are found, we can anticipate that if mastoiditis does develop

*Read before the Sixty-Second Annual Session of the Arkansas Medical Society, Little Rock, April 13, 1937.

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it will be of the coalescent type with a comparatively mild clinical course and a rapid convalescence after operation. If, however, streptococci prove to be the predominating organism, then we should look for the stormier picture of a hemorrhagic mastoiditis and remember that in this type thrombosis of the lateral sinus is the commonest complication which may ensue. The recognition of pneumococcus Type III in the discharge from the ear is not as simple as that of the preceding organisms, but, if the smear is stained by the Gram method, and any encapsulated organisms are found, we should consider them as probably pneumococci and be on the lookout for a so-called masked or latent mastoiditis, remembering that not infrequently meningitis or brain abscess cause the first severe symptoms to be noticed.

Coalescent Mastoiditis:

In this type of mastoiditis, usually due to staphlococci, or to non-hemolytic streptococci, there is an "empyema" of the middle ear and antrum. This pus invades the adjacent cells and the infection extends by contiguity until the entire mastoid process may be involved. The edema of the membrane lining the cells is so intense that it obliterates the nutrient vessels of the membrane itself and of the intercellular trabeculae, resulting in a necrosis of the bone ultimately involving all the cells in the mastoid process. This destruction may reach and penetrate the outer cortex, especially in children, resulting in a subperiosteal abscess, or the destruction may extend through the inner table, resulting in a perisinus abscess in the posterior fossa, of an extra-dural abscess in the middle fossa. X-rays in this type of mastoiditis will show a general haziness or clouding of the cells in the early stages, and later an actual bone destruction. Clinically this type is comparatively mild, the temperature not being exceedingly high and the patient not being extremely toxic. The tenderness over the mastoid gradually spreads; the periosteum become thickened and edematous and feel velvety under the touch, and later a subperiosteal abscess may develop. There is usually a sagging of the postero-superior canal wall just external to the drumhead. The amount of the purulent discharge, which is frank pus, is greater than can be explained by a simple otitis media, and shows distinct pulsation.

The diagnosis having been made, the next important question is deciding the time of operation. It is generally agreed that if the condition of the patient will permit, operation should be postponed until the first onset of the infection has subsided, localization has occurred, and the patient has had time to build up resistance to the infection. This time of operation cannot, of course, be determined by the calendar, but it is usually stated that the mastoid should not be operated on until two or three weeks have elapsed since the onset of the middle ear infection. However, all cases cannot safely be permitted to wait this long, and the time of operation must be determined by a careful study of the patient from day to day, considering not only the pain, pulse and temperature, the urinalysis, blood count, x-rays, and other laboratory findings, but the clinical condition of the patient and whether his progress in combating the infection is favorable or unfavorable. For this reason these mastoid suspects should, if possible, be hospitalized, in order that they may have these advantages which are not available in the home.

Having decided to operate, and the proper time having been determined, every effort should be made to clear out all of the cells in the mastoid process, not only the antrum and surrounding cells, but the tip-cells, the chain of cells extending from the tip up to the aditus closely behind the external bony canal, the cells in the posterior root of the zygoma, those running backward along the squamo-mastoid suture, and the group of cells often found extending backward from the mastoid process, below the lateral sinus. The more thoroughly and completely these cells are exenterated, the calmer and shorter will be the convalescence, and the danger of complications and secondary operations will be greatly reduced. In closing the wound, care should be taken to bring the periosteum together as well as the skin, as, from the inner surface of the periosteum, new bone is generated and subsequent deformity reduced to a minimum. The use of a rubber drain instead of guaze is strongly urged, as the latter, not infrequently, acts as a plug instead of a drain. Also the removal of a guaze drain is exceedingly painful, while one of rubber can be removed and reinserted without discomfort to the patient, and with a feeling of certainty that drainage is not being obstructed. The drain should extend as far as the antrum until all discharge by way of the canal has ceased, after which the mastoid wound may be allowed to close.

Hemorrhagic Mastoiditis:

In this type of mastoid infections the progress is much more rapid and severe than in the coalescent type. The patient shows more evidence of sepsis and positive blood cultures are not uncommon. This is due to the fact that while extension may be by contiguity, it is more apt to extend by means of thrombosed blood vessels in the cell walls and may even reach the lateral sinus, with a consequent bloodstream infection, before the X-Ray shows any signs of bone destruction. Edema over the mastoid is not common in this type. Because of this rapid extension of the infection from the mastoid antrum, and because streptococcic infections do not show a tendency to localize, waiting for the patient to develop resistance to the infection is a much more anxious and hazardous procedure than in the coalescent type. However, if the patient is hospitalized and under close observation, this waiting process can be utilized at least until the first onset of the infection has had a chance to subside; and, if this is done, the patient is much less apt to develop postoperative complications than if the operation is done while the infection is still "hot." Occasionally, however, we see a case in which the sepsis is so severe, and the patient's condition growing worse so rapidly, that we are obliged to operate earlier than we would ordinarily.

In operating on this type of mastoiditis, we find quite a diferent picture in the bone. After removing the cortex, instead of finding most of the cells destroyed and a cavity containing pus and broken-down tissue, as we do in the coalescent type, the cells are filled with swollen mucous membrane, which resembles granulation tissue; the bony trabeculae are intact and usually have to be removed with a gouge and mallet rather than with a curette; both the soft tissues and the bone bleed very freely; and oftentimes this operation is performed in a pool of blood. It is because of this feature that it has been given the name of "Hemorrhagic Mastoditis". The same effort should be made in this type to clean out all of the cells and do as complete an exenteration as possible, as in all other cases. The wound is closed in the same manner and a rubber drain used. The postoperative course of these cases is usually stormier than in the coalescent type, and, instead of the temperature dropping to normal in twenty-four hours, and the patient feeling quite all right, it may be several days before this desired state of affairs ensues. In addition to the usual pre and postoperative care, we have found that small transfusions of blood, given daily or every other day as seems necessary, are most effective in aiding the patient to overcome his infection. These transfusions are especially valuable in those cases showing a lowering of the percentage of hemoglobin. Recently, in this type of case, we have been using Prontosil, which seems to have a specific effect in combating streptococcic infections. In an adult the intramuscular injection of 10 cc. of Prontosil, (2½% solution) every four to six hours for two or three days, or until the symptoms show signs of abatement, followed by the oral administration of four to eight tablets of Prontylin daily, has seemed to be of great benefit. Of course, sufficient time has not elapsed, nor enough cases been so treated, to justify any dogmatic assertions, but inasmuch as no serious toxic effects following the use of this drug have been reported, and as the cases in which it has been used have seemed to show a definite response, we hope it may prove a valuable adjunct in treating streptococcic infections in the field of our specialty.

Latent Mastoiditis,
Pneumococcus Type III.

This type of infection constitutes a most dangerous condition because the clinical symptoms are so slight that the seriousness of the situation may be overlooked by the patient and even by the doctor, and the first cause of alarm may be the beginning of a meningitis. The symptoms show very little difference from those of otitis media due to this organism, which have already been enumerated. It is frequently difficult to determine whether the eardrum should be incised or not. The redness may involve only part of the drumhead, which, however, appears thickened, and there may be no distinct bulging, although the normal contour, if compared with the uninvolved ear, may show a tendency to fullness. If this condition persists, the drumhead should be incised, and, at this time, some additional information may be obtained. Instead of cutting easily, as a drumhead ordinarily does, there will be a dragging sensation on the knife, as though one were cutting wet chamois leather, and the drum will prove thicker than suspected. There is usually a very slight discharge, which is of a bloody, mucoid type; and, in a case of this sort, microscopic examination is most helpful, the discovery of any encapsulated organism preventing us from being lulled into a false sense of security. The discharge frequently stops in three or four days and the drumhead closes, upon which there is

a return of the moderate or slight pain, and a behavior by the drumhead, as previously described. Re-incision will again relieve the case for a few days. When an otitis media shows this tendency,—neither to get well nor to get worse—one should suspect an infection with pneumococcus Type III and treat it as a potential mastoid. X-Rays in this type of infection are most helpful, as bone destruction is the usual type of pathology, and a careful comparison of plates, taken at intervals of from four days to a week, will enable one to detect bone involvement early, before extensive destruction has taken place. The percentage of intracranial complications, such as meningitis and brain abscess, is high in this type of infection, but fortunately they do not occur, as a rule, until about six weeks after the onset of the ear infection; consequently, if these cases are recognized and operated on within a month, in all probability intracranial complications will not ensue. If meningitis does develop, it is almost invariably fatal. The case should be kept under observation for a considerable time, because of the possibility of mastoiditis continuing even after the otitis media has subsided and the drumhead has healed, and because of the possibility of brain abscess or some other intracranial condition developing as a late complication.

A. M. A. RADIO PROGRAM FOR MARCH

Broadcasted each Wednesday from 2 to 2:30 p. m. over the Red network.

Public Health

March 2—Water, Waste and Sanitation. Importance of community control of water supplies, sewage disposal and general sanitary matters.

March 9—Protecting Perishable Foods. What the community can and must do to protect fresh foods such as fish, fruits, vegetables, meats, bakery goods.

March 16—Keeping Books on Health. The meaning and the importance of vital statistics, contagious disease reporting and community health records.

March 23—Catching Disease from Animals. Rabbit fever, rabies, undulent fever and similar infections, and what can be done about them.

CONSERVATIVE SURGICAL TREATMENT OF DUODENAL ULCER*

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Doudenal ulcer is truly a medical problem unless complicated by hemorrhage, perforation, or obstruction, or if medical treatment fails. Unfortunately, the etiology of duodenal ulcer has never been determined, and for this reason the treatment has never been uniform and satisfactory in every case. We still do not know what causes excite ulcer formation, why certain patients have a so-called ulcer diathesis, why the symptoms are intermittent or seasonal, and why duodenal ulcers seldom become malignant.

There are probably two principal factors in the formation of duodenal ulcer, the first inherent in the ulcerating potentiality of acid-pepsin, and the other maintained in the defense which the tissues possess and by which they protect themselves against the eroding action of the gastric chyme. It has been shown that the duodenal mucosa has an increased resistance inherent in its cells not found in the jejunum. Rivers suggests that possibly the duodenum produces a secretion which adheres to the mucosa and makes it less vulnerable, or a substance is elaborated in the wall of the duodenum that alters gastric chemism to curtail its eroding properties. Mann and Williamson have demonstrated this rather conclusively in their experimental work, by which the gastric contents were led directly into the jejunum and the duodenal content was shunted into the ileum, thus depriving the jejunum of the admixture of bile, pancreatic and duodenal secretions. But substituting the jejunum where the duodenum normally existed and allowing it to resist as well as possible the eroding action of acid chyme, jejunal ulcers developed in 95% of the cases.

In the development of a duodenal ulcer it is likely that inflammation, duodenitis, erosions, or debilitating disease and septic emboli may lower the resistance of the doudenal tissues, and prepare them for ulceration. The periods of fluctuation are probably secondary to physiological factors. We must also bear in mind that certain individuals are prone to ulcer formation, that is, have a so-called "ulcer diathesis." These patients are usually high-strung, nervous, restless, and self-centered, and are never able to relax. This type of case is treated with difficulty,

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and in addition to careful dieting, it is necessary to keep the patient from worrying, to control the emotions, and to see that proper rest and relaxation is obtained. Of these patients with so-called "ulcer diathesis," it may be said that neither medical nor surgical treatment offers very promising results. They have recurrent ulcerations after any and all types of surgery, not excluding gastric resections.

In general the treatment of duodenal ulcer should consist in prescribing the proper diet, usually of the Sippy type; the reduction or elimination of infections, especially if located in the teeth, tonsils, gall bladder or appendix; the use of alkalies, provided they are not used to excess; the frequent injestion of food to avoid hypersecretion, and the elimination of irritants like tobacco and alcohol. Sedatives and atropine may be helpful at times. Some new therapeutic measures have been recommended in the treatment of ulcer. It has been suggested that in active duodenal lesions there may be a hypo-protection as a result of relative mucin insufficiency, and mucin has been administered to neutralize the hyper-acidity and form a mucus coating on the mucous membrane wall to stop up some of the gland ducts. Aluminum preparations are being used to buffer the gastric acidity. Other preparations have been suggested to allow the healing of ulcers, theoretically at least, by protecting them with gelatine, acacia, olive oil, and lecithin, and even the lowly okra has been recommended. Injections of Histidine have been used during acute attacks, apparently with clinical and radiological improvements and with relief of pain. The results with some of these treatments, however, may be entirely psychic, for injections of saline have been known to bring relief from pain after three or four injections. Malfunctioning of the glands of Brunner has been considered responsible for duodenal ulcer and Rivers has attempted to aid the distressed gastro-duodenal tissues by administering an extract of the duodenal mucosa and submucosa of hogs. No definite conclusions were drawn from his work, but some encouraging results were noted. Let us hope that out of the maze of research and suggestive therapy, something of value may be found to cure duodenal ulcers.

From a surgical standpoint, we must bear in mind that so-called ulcer indigestion is usually not due to actual soreness of the ulcer, but to abnormal states of tension and spasm, such as pylorospasm. Furthermore, the ulcer may be merely an incident in the broader syndrome of indigestion and hyperacidity, which may present the same symptoms, even without the presence of any ulcer at all.

To overcome the motor disturbances, the ulcer should be excised if feasible, and the making of a wide stoma is advised, whether by partial gastrectomy, gastroenterostomy, or pyloroplasty; the latter probably offers the best chance of breaking up the indigestion reflexes. But no operation so far devised guarantees a cure, nor is it likely than any surgical sure cure will ever be found. The difficulty at bottom is a disturbance of motility which may persist after any type of interference.

What then must be the prerequisites for the surgical treatment of duodenal ulcer from the patient's standpoint? His should be a minimal risk; he should be given a reasonable chance for complete cure, and ample provisions should be made for further operation if necessary. Surgically, we have several modes of attack, and these in general are plastic procedures devised to enlarge the pyloric canal, or so-called pyloroplasties; gastro-enterostomy; and partial gastric resection with removal of the pyloric antrum and portions of the fundus of the stomach. We shall consider pyloroplasties last.

Gastroenterostomy is still the operation most widely used for duodenal ulcer, and in selected cases is an ideal procedure. It allows the stomach to empty rapidly; usually lowers the acids thirty to fifty per cent, and allows the ulcer to heal in a short time. It is most satisfactory in patients of middle age, whose acids are near normal, whose symptoms are of long duration, and who have a certain amount of cicatricial stenosis and obstruction. Poor results are obtained when there has been an error in the original diagnosis, faulty technique, faulty diet, and leaving behind foci of infection such as diseased gall bladders and appendices. Recurrences after gastroenterostomy usually result from lack of resistance of the jejunum to acid, and gastro-jejunal ulcers vary in frequency between two to three per cent in such institutions as the Mayo Clinic to thirty-four to forty per cent in New York. In some of the European countries, especially Germany, gastroenterostomy is not popular, and as a result more radical procedures, such as partial gastric resections, are more common. This probably is justified because along with the duodenal ulcer there is usually an associated gastritis, or there are multiple ulcers, and treating the duodenal lesion alone is not satisfactory. Recurrences after gastroenterostomy usually develop within one-and-

a-half years after operation; the cases with a relative achlorhydria after operation usually give the best results.

Partial gastrectomy, whether of the Billroth or Polya type, reduces the gastric acidity most of all, and recurrences supposedly are not common after this procedure. It may be indicated in ulcer patients who have had conservative medical and surgical treatment without relief, in patients with both gastric and duodenal lesions or marked gastritis, or in certain hyper-active young men with primary ulcers and large volumes of secretion and high free acid. Although some surgeons have recommended this procedure very emphatically, we know that recurrences do develop occasionally, usually within a year, and that gross hemorrhages may even occur. The mortality is somewhat higher than in other types of surgical treatment.

This brings us then to the procedure upon which this paper is based, namely pyloroplasty, with or without excision of the ulcer. These plastic procedures are especially applicable for the treatment of early duodenal ulcers in young persons. They are usually satisfactory, the mortality is low, convalescence is prompt, and in more than 90% a permanent symptomatic cure can be expected. The emptying time of the stomach is reduced, but there is probably little effect on reducing acidity, although neutralization and dilution of acids is increased by the free admixture of gastric and duojenal juices. It should be satisfactory, especially if the ulcer is removed.

After pyloroplasty, an occasional patient may have persistent indigestion, but it is usually different from the original ulcer symptoms. Recurrences are relatively infrequent, and if they do occur they are rarely as troublesome as after other operations. Kirklin has noted that the evacuation time early after operation is somewhat retarded, but eventually becomes free and the emptying time is shortened.

Pyloroplasties are said to have been attempted as far back as 1810, but Heinike in 1886 and Mikulicz in 1887 first really popularized the operation later known as the Heinike-Mikulicz pyloroplasty. Many other pyloroplasties have been devised with sucessful results. It seems, however, that return of the pyloric sphincter control later defeated the purpose of the operation in some cases.

Judd realized that an extensive operation might be performed on the pylorus, in which the ulcer might be excised, the sphincter action of the pylorus abolished, and the outlet enlarged for quicker emptying, thus allowing regurgitation of the alkaline duodenal content to neutralize gastric acidity. The operation was first employed by Judd in 1924, and as far as I know was original with him. It seemed especially feasible because it maintained normal physiological action and materially reduced the number of recurrent ulcers.

In this operation, the anterior one-half of the pyloric sphincter was excised and closure made as a gastro-duodenostomy. Later, in order to further overcome the possibility of the return of sphincter control, two-thirds and even three-fourths of the sphincter was excised, along with the lower part of the stomach. The main requisite for this operation is that the duodenum must be fairly mobile. In this procedure the mortality is almost nil. Recurrences are seldom found, and failures are attributed principally to adhesions of operative field to the parietal peritoneum or adjacent viscera. The duodenal lumen is usually adequate, but adhesions may interfere with the normal emptying of the stomach. In cases of duodenitis and those with marked hypertrophy of the pyloric sphincter, the results are very good. Ulcers of the posterior wall also heal readily in many of these cases.

In speaking of two plastic procedures, that is, a lateral anastomosis between the stomach and first part of the duodenum, and the operation described above, Judd, in one of the last papers he wrote, printed in 1935, said: "These operations have a better physiological basis and are more practical than any anastomosis between stomach and jejunum, which always provide an opportunity for subsequent serious complication of jejunal ulcer. Furthermore, there is a wider distribution of the food stream and reduction of physical trauma. In addition, use of either of these procedures permits the acid content of the stomach to empty into the most alkaline portion of the duodenum, which is best fitted to care for this acid material. These two operations should be employed more often than they are." This master surgeon, after reviewing carefully the enormous number of operations performed for duodenal ulcer at the Mayo Clinic for a period of twenty-eight years, concluded that in selected cases, gastro-enterostomy continues to be a useful operation for the treatment of duodenal ulcer, especially in older patients, for those who have had symptoms of obstruction. At present among the clientele of most surgeons in this country, there seems to be no good reason for radical resection for duodenal ulcer. In conclusion, he mentions the

fact that pyloroplasty had been performed in 930 cases at the Clinic with an operative mortality of less than 1%; that it had offered very satisfactory results, and that its use had been increased 100% in the past ten years.

Another master surgeon, Deaver, realizing the necessity for overcoming the spasm of the pyloric sphincter in gastro-duodenal lesions, used this operation in a series of cases in conjunction with gastric resection, gastro-enterostomies, cholecystectomies, sleeve resections, and even in acute perforated duodenal ulcers with apparently gratifying results.

In my own experience, gastroenterostomy has proved an excellent operation for duodenal ulcer, and we have had practically no post-operative complications, probably because most of the cases were of the ideal type for this procedure, that is to say they had suffered from ulcer over a long period of time, and had all had the proverbial "nine complete and permanent medical cures." I have performed the Judd operation in about a dozen cases, in some of which the anterior portion of the sphincter muscle was resected because of marked hyper-trophy in association with diseased gall bladders, in order to overcome the associated pylorospasm.

In the past few months, I have used it three times for duodenal ulcer, and in each case the ulcer was excised. In November, 1936, I operated on a woman fifty-six years of age, the wife of a physician, and removed a large adherent gall bladder filled with stones, and excised the ulcer with the anterior half of the pyloric sphincter. The second case, a woman of fifty-three, was operated on in January of 1937, and the routine procedure done, including excision of the anterior ulcer, and cauterization of a posterior contact ulcer. The third patient was a woman of fifty with a long-standing ulcer history. On March 13, 1937, she was brought to St. Vincent's hospital with an acute perforation of a duodenal ulcer, and I operated on her six hours after the perforation. The perforated area, ulcer, and anterior one-half of the sphincter muscle were resected and the usual closure made. She made a most uneventful convalescence and returned to her home in two weeks. Although it is too early to draw any conclusions from these recent cases in regard to a permanent cure, the convalescence in each case was strikingly uneventful and to date they have been free of symptoms.

In one case, a woman of fifty-six on whom I did a cholecystectomy for chronic cholescystitis and the Judd operation for duodenal ulcer in 1929, the patient was free of symptoms for four years. About three years ago, while under nervous strain and great worry, she developed ulcer symptoms again, and last fall after making eight trips to her sick mother in a neighboring state and eventually losing her mother, she had a gastric hemorrhage. A gastroenterostomy was done on this patient three weeks ago and she is making an excellent recovery. She is of the "ulcer diathesis" type and may have trouble in the future.

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The medical staff of the Menninger Clinic will conduct its fourth annual Postgraduate Course on **Neuropsychiatry in General Practice**, April 25 to 30, inclusive, at the Menninger Clinic, Topeka, Kansas. The course this year will include a brief introduction to the fields of neurology and psychiatry and a specific application of this knowledge to the large group of cases of psychoneuroses, phychoses and psychogenic and neurogical disorders which every physician meets in his daily practice. Suggestions made by those who took the course last year have been embodied in this year's program in order to make it applicable to the most common practical problems of the physician.

As in previous years, several guest speakers, prominent in the fields of neurology and psychiatry, will appear at the evening sessions of the course.

THE APPLICABILITY OF ALLERGY TO GENERAL PRACTICE*

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The realization that the phenomenon of anaphylaxis in the guinea pig had some resemblance to bronchial asthma in man stimulated further animal experimentation with the problem of anaphylaxis and sharpened clinical observation to the recognition of seemingly similar conditions in man. It developed that there were definite differences between anaphylaxis and its predicated expression in the human, so that the term allergy, a word coined by von Pirquet[1] in 1906 to denote a state of altered reactivity or a state of changed capacity to react, was employed as a generic term to indicate these clinical conditions. Unfortunately these differences have led to confusion, due not only to the failure of man to exactly reproduce the reactions of the lower animals, but also to the inherent complexities of man affected with disease and the variableness and apparent diagnostic inaccuracy, particularly on the negative side, of the cutaneous reaction.

It is the consensus that the local reaction of allergy is a tissue reaction, probably due to irritating physico-chemical changes, the result of a union of individual allergens with specific allergic antibodies attached to the tissue cells. Given the capacity for sensitization, the allergens reach the tissues, either directly by contact with the nose or skin, causing seasonal and perennial vasomotor rhinitis, dermatitis, urticaria, and angioedema; by inhalation through the nose or bronchi, causing bronchial asthma, or by ingestion, causing acute gastroenteritis, abdominal pains, or mucous colitis. They may also reach these tissues as well as others not receptive to direct action, through the blood by absorption from the intestines or foci of infection, or from parenteral injections. As examples, there are individuals who have vasomotor rhinitis, bronchial asthma, migraine, or dermatitis, solely from the ingestion of specific substances; others have abdominal pain, urticaria or bronchospasm, following therapeutic injection for the purpose of hyposensitization. It is the opinion of some[2] that this mechanism is an enhancement of a normal physiological response which probably exists in all people,[3] and is not necessarily a pathological condition.

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It was the observations by clinicians on bronchial asthma and annual vasomotor rhinitis which determined that the frequently associated conditions of eczema, perennial vasomotor rhinitis, migrainoid headaches, urticaria, angioedema, such gastro-intestinal disturbances as dyspepsia nervosa, mucous colitis, and abdominal pain without detectable organic cause, and purpura were also allergic reactions. It has been further established that capillary permeability leading to various degrees of edema, and smooth muscle spasm is the basic pathology for all presenting symptoms. Thus, edema of the nasal tissues is present in hay-fever and perennial vasomotor rhinitis, of the bronchi in bronchial asthma, of the brain in migraine, of different layers of the skin in urticaria, angioedema, and dermatitis, and of the intestines in allergic manifestations in the gastro-intestinal tract. In some of these it has been possible to delineate smooth muscle spasm as well; whether the result of irritation and secondary reflex spasm, or as a primary reaction remains for future investigation to determine.

Irrespective of the clinical entity, the typical allergic individual possesses criteria by which he can be identified: 1. In over one-half of such individuals there is an inherited capacity for such sensitization; generally, however, the specific hypersensitiveness is not transmitted. The parent with asthma due to feathers may have one child with migraine due to chocolate and another child with vasomotor rhinitis due to pollen. Of great practical importance is the fact that children may be extremely hypersensitive, yet have no discoverable traits in their antecedents; again, there may be children who escape hypersensitiveness, whose antecedents undoubtedly had diseases allergic in origin. 2. The allergic individual may have more than one clinical allergic manifestation. The combinations of asthma and hay-fever, or asthma and eczema, eczema and migraine, purpura and urticaria, may follow one another or occur at the same time. Commonly, the clinical history is that of eczema during infancy, hay-fever during early adulthood, and asthma in later adult life. Such transmutation of symptoms is typical. 3. Characteristically, the allergic indiviual has an increase of eosinophils either in the blood, the reacting tissues, or the secretions. 4. The allergic individual is one in whom it is possible to elicit a characteristic cutaneous reaction. In most instances the substances responsible for the symptoms will produce an itching wheal with a halo of erythema when placed either upon a small cut in the surface of the skin or injected intracu-

taneously. Again, it is of practical importance to know that there are individuals who undoubtedly have afflictions due to hypersensitiveness, yet do not show either of these cutaneous reactions. 5. And finally the allergic individual is one chronically ill but seldom dying from his affliction, a high morbidity with a low mortality.

Although it had been known for some time that the von Pirquet technique and its modification, the "scratch test," were methods of diagnosing hypersensitiveness in cases of hay-fever, asthma, and food allergy, it was the work of Walker[4] and his coworkers that familiarized the medical profession with its potentiality as a means of diagnosis. While the intracutaneous method of testing for hypersensitiveness was first used by Knox, Moss and Brown[5] to test rabbits for horse serum sensitivity and used shortly thereafter on man by Moss[6] for the same purpose, it was the studies by Cooke[7] and his colleagues that standardized the method and determined its usefulness as a diagnostic measure in allergic conditions. The facility and apparent harmlessness of the scratch method coupled with the enthusiasm that attends all new medical procedures, created the tendency to consider all patients with or without the allergic diathesis, in terms of skin reactions. Treatment based on these reactions produced remarkable cures but also a great many disappointing failures. It has required the alembic of critical clinical study of the past twenty years to define their limitations and give them their proper clinical evaluation. Skin tests for allergy are an indispensable part of the diagnostic procedure but may not indicate the etiologic diagnosis—just as the identification of an allergic disease does not depend solely for its proof upon the presence of positive skin reactions.

In my own experience, with food allergy, in cases clinically sensitive, the skin test was diagnostic in 84% of hay-fever cases (19 cases skin sensitive to pollen and foods) and in 53% when the hay-fever was complicated by bronchial asthma (13 cases skin sensitive to pollen, other inhalants, and foods); in 56% of perennial vasomotor rhinitis (42 cases skin sensitive to inhalants and foods, or foods alone) and 58% when it was complicated by bronchial asthma (12 cases sensitive to inhalants and foods); in 44% of allergic purpura (18 cases observed by Dr. H. L. Alexander and myself,[8] 7 additional cases reported in the literature by other observers—of these, 15 cases were skin sensitive to foods); and in 36% of allergic headache (61 cases—all skin sensitive). It is important to realize that the skin test was negative, yet food induced symptoms in the remainder of the cases.

Some idea of the frequency of positive skin reactions in the various allergic manifestations was obtained by Alexander[9] from the compiled statistics of 11,443 cases of allergy, representing a cross section of the literature, and including as many as thirteen observers for one allergic condition. This compilation showed that the skin test was positive in 93% of hay-fever cases, in 55.7% of vasomotor rhinitis, in 52.7% of eczema (infant and adult), in 52.7% of bronchial asthma, and in 26.5% of gastro-intestinal cases.

The following case histories exemplify the reciprocal relation that must be established between the clinical history and the cutaneous reaction before the positive skin reaction is accepted as the etiologic factor. The first examples will illustrate the importance of the clinical history in evaluating the positive cutaneous reaction.

A man, aged 27, complains of non-seasonal asthma since the age of 2 years. A detailed clinical history develops that he has many more paroxysms of asthma when stopping at home; his longest free period (2 years) was while working on a telephone gang out of Kansas City, Missouri; and that it has been only in the past seven years that the asthma has been non-seasonal; previous to that he was more likely to have asthma during September and October. He was perfectly well the two weeks he lived in St. Louis, while undergoing medical investigation. The largest positive skin reaction was obtained to the pollen of ragweed. The clinical history does not correspond to hypersensitivity to ragweed; there is an abundant growth of ragweed in the environs of Kansas City, yet his longest free period occurred while working there. The clinical history points to an etiological agent, other than ragweed, in his home environment; ragweed may have been the cause of his asthma in the beginning, but it cannot be the cause of his non-seasonal asthma which is more likely to exist at his home. Hyposensitization injections with solutions of ragweed pollen will not be given until clinical observation determines that he has symptoms when exposed to ragweed pollen when away from his home environment.

Another example is that of a woman, aged 50, who for a period of two years, averaged two so-called head colds a week, of one or two days' duration. She gave a positive skin test to feathers, but the clinical history was not that of sensitization to feathers. Further questioning, aided

by the dietetic diary, indicated banana as the cause. The symptoms remained in abeyance when banana was not eaten.

The next examples will illustrate the importance of the clinical history in indicating the test substance.

A lad of 12 years has had mild non-seasonal asthmatic attacks for two years, more frequent in the winter; paroxysmal sneezing frequently occurs while in his manual training class; the ingestion of trout was suspected for one episode of circumocular angioedema and urticaria and upon one occasion the handling of LePage's glue was followed by a facial erythema. The history points to fish and fish glue as the etiologic agents and positive cutaneous reactions were obtained to these substances.

A lad of 9 years has had non-seasonal vasomotor rhinitis for four years, worse during the winter. Frequently it is accompanied by wheezing respirations. The important point in the history was that the father was a hunter of deer, and the mounted deer head decorated the home. The dominant skin reaction was obtained to deer hair.

A druggist, aged 38, had non-seasonal asthma for four years. Avoiding the allergens which gave positive cutaneous reactions, with the routine tests, did not improve the asthma. Then he was tested with the substances with which his profession brought him in contact and gave a positive reaction to lycopodium. He has had no asthma since avoiding lycopodium and contact with the other allergen which gave positive reactions induces no symptoms.

The bare recital of the striking points in these case histories does not convey the difficulties of their elicitation. Percipient questioning is necessary to educe such relevant relationships as environment and changes in environment, seasonality, occupation, and diet to the symptoms.

Bronchial asthma was one of the first afflictions, allergic in origin to be extensively studied by clinicians. From the standpoint of etiology it has been convenient and helpful to divide it into seasonal and non-seasonal types. Pollen, seasonal foods and seasonal environmental contacts are the more frequent causes for the former; while feathers and other animal danders, orris root, house dust, cottonseed, and wool among the inhalants; wheat, egg, milk, chocolate, fish, chicken, pork, nuts, spices, condiments, fresh fruit, and the legumes among the foods are the most frequent causes for the latter. While inhalants are the most frequent etiologic agents, when considering all cases, food is the more likely to be the offending factor in childhood and there are many instances where it is the dominant factor in life. It is also an accessory factor in many instances where the asthma is primarily due to an inhalant. Skin tests are positive and diagnostic in about 50% of instances. Of great practical importance, however, is the observation that improvement may follow a change of, or in the environment, or the removal of the suspected foods from the diet in patients who fail to give positive cutaneous reactions.

There is no esoteric reason to consider the patient who sneezes or has a blocked nose from the absorption of feathers or orris root any different from the one having similar symptoms from the absorption of pollen, but from the standpoint of etiology it is helpful to divide vasomotor rhinitis into annual or seasonal (hay-fever) and perennial or non-seasonal types. Inhalants more often than ingestants are the cause in both types. Rarely is food the only etiologic agent. When foods induce the symptoms they frequently are the dominant factor in multiple sensitization or they may be ancillary to an inhalant hypersensitiveness. In the non-seasonal or perennial forms the most frequent causes are animal epithelia, orris root, cottonseed, house dust, and occupational dusts among the inhalants, and wheat, egg, milk, and chocolate among the foods. Air borne pollen of trees, grasses, and weeds are the most frequent causes of the seasonal or annual (hay-fever) type. Of particular interest are the cases of this group whose symptoms are alleviated or completely controlled by excluding certain foods from the diet in addition to hyposensitization injections. In some of these, the foods excluded do not produce symptoms at other times of the year. A few cases are made comfortable by diet alone.

The eczema of infancy and early childhood is more frequently due to food. In later life it is usually associated with inhalant or contactant hypersensitiveness. Cutaneous tests are positive and diagnostic in about 50% of uncomplicated cases. When the eczema is associated with seasonal vasomotor rhinitis or bronchial asthma, they are positive in about 80% and usually to several allergen. Experimental removal of egg, wheat, and cow's milk from the diet will benefit many but not all with negative cutaneous reactions. The dietetic diary will detect other foods which should be experimentally removed from the diet. Hypersensitiveness to foods often complicates apparently clear-cut cases of contact dermatitis so that in these a successful thera-

peutic result is obtained only after avoiding both the contactant and ingestant factors.

The specificity of the urticarial wheal of the cutaneous test in diagnosing some allergic conditions and the certainty with which urticaria can be induced by the second injection of horse serum has led to the belief that all urticaria was the result of a similar mechanism. While this conception has aided in determining the etiologic agents in some instances, nevertheless chronic generalized urticaria remains one of the most difficult clinical problems. The problem is simplified by considering urticaria as a symptom of many diseases, and not necessarily a manifestation of the allergic state. The offending food or drug can often be surmised from a painstaking and discriminative clinical history, and a meticulously accurate dietetic diary is of great assistance. Acute generalized outbreaks, repeated at intervals, are usually due to food infrequently eaten and often known to the patient. Single attacks of urticaria may be due to an unusual food or drug, but are also due to infections and perhaps other factors. Focal infection appears more frequently as the cause of chronic generalized urticaria although, in the occasional case, food is the only cause. In some cases the relationship between the food and the urticaria is definite. The urticaria occurs a short time after ingestion and promptly disappears upon abstinence from the specific food. In others, because of the analogy to serum sickness, this relationship is surmised rather than proved. In this latter group, the outbreak may occur a day or two after eating an excessive amount of the food at one meal or a moderate amount over several sequential days. In some, while the outbreak occurs following the ingestion of a specific food, the attack is prolonged for days. There are also some patients whose urticaria will disappear on a restricted diet, leading to the assumption that one of the excluded foods caused the urticaria, but does not recur upon returning to their ordinary diet. Such clinical occurrences make us doubt that foods are the sole cause in these cases. They may, however, be the factor which governs the allergic equilibrium.[10] Skin tests as a rule do not disclose the etiologic foods. Positive reactions are often obtained to allergens which appear to be unrelated to the urticaria, and any food has the capability of causing urticaria in the susceptible individual. Statistically, egg, wheat, milk, potato, oranges, and pork are the more frequent causes in the chronic type; seasonal fruits, shell fish, and drugs are most evident in the acute cases.

Recurrent headache[11] and according to some, typical migraine[12] are often upon an allergic basis. Allergy is considered the underlying factor of these symptoms because most of these patients have other allergic manifestations and have antecedents either with allergic diseases or with similar headache, one or both. Foods are the most frequent cause so that it is possible not only to keep the headache in abeyance by completely avoiding the suspected food but also to induce the headache by its deliberate ingestion. Often the offending food can be suspected by correlating the clinical with the dietetic history and diary. Egg, milk, chocolate, onion, wheat, potato, and beef more frequently cause these headaches but any food may be the etiologic agent. Occasionally inhalants, most often orris root or feathers, are the cause. Cutaneous tests are positive in the majority of cases but are not always diagnostic. In those with negative cutaneous reactions, trial diets are helpful either as elimination diets or as corrective diets in those with bad dietary habits.

Symptoms limited to the gastro-intestinal tract may be caused by hypersensitiveness—especially where there is no demonstrable organic lesion. However, on the basis of Menkin's[13] demonstration that foreign protein introduced into the blood stream accumulates in the inflamed area where it is found in greater concentration than in normal tissues, one may postulate that hypersensitiveness can induce symptoms at the site of chronic infection. It is a clinical observation for patients with chronic infection somewhere in the gastro-intestinal tract to assert that specific foods will induce or increase their discomfort. Obviously the proof is difficult and usually impossible. In our own experience a patient had three operations without relief (first operation identified chronic cholecystitis without stones), at intervals of about two years, for paroxysmal pain in the right upper quadrant, which ceased only with abstinence from egg and egg containing foods. Since allergy produces edema and smooth muscle spasm, and since this reaction may occur anywhere throughout the length of the gastro-intestinal tract, influenced by its normal or perhaps pathological physiology, the manifestations, of necessity, will be variable. These include canker sores, various degrees of epigastric discomfort ranging from mild pain to that simulating the ulcer type, abdominal discomfort, generalized or simulating gall bladder or appendiceal pain, diarrhea, spastic constipation, pruritus ani, mucous colitis, and cyclic vomiting. Rarely is there an acute response characterized

by nausea, vomiting, diarrhea (sometimes bloody), severe pain, often urticaria, circulatory collapse and even death within a few minutes or hours after eating the allergenic food. Egg, milk, wheat, onion, spices, condiments, and uncooked fruits are the more frequent causative foods, with any other food possessing the potentiality of inducing symptoms. These are indicated by the cutaneous tests in about one-half of the cases. In cases in which other allergic manifestations have been or are present, the percentage of positive cutaneous reactions is higher but the etiologic significance is often unrelated to the gastro-intestinal symptoms. The dietetic diary must be interpreted with unusual care because all symptoms referable to the gastro-intestinal tract, which follow ingestion even in an allergic individual, are not due to allergy. Prejudices to certain foods often determine their ability to cause symptoms, and dislike for certain foods are more often due to distaste or fear of the significance of the attendant symptoms of indigestibility rather than to an unconscious defensive mechanism against the allergic reaction. The relations of these aversions to food allergy is often illuminated by their incompatibility with the present theories relating to the clinical application of the allergic reaction. Symptoms thought to be due to an allergic reaction, in the absence of demonstrable organic disease, may actually be due to the ingestion of direct irritants to the stomach or the intestines, to chemcial or drug-like substances contained in vegetables and fruits, to a diet containing an excess of carbohydrate, indigestible cellulose, or fat, to abnormalities of the intestinal juices and ferments, or to diseases elsewhere in the body.

Accumulating clinical evidence shows that some of the clinical conditions in which purpura[14] is a presenting symptom may be on an allergic basis. These conditions include the Schonlein-Henoch group and the Osler erythema group with visceral manisfestations. The allergic basis for these conditions should be suspected when they occur in individuals with other allergic manifestations. Positive cutaneous reactions are present in slightly more than one-half of the cases and are diagnostic in one-third. Egg, milk, wheat, and chocolate are the more frequent causative foods, with any other food possessing the capability of producing symptoms.

I would conclude by stressing that the practical application of the knowledge gleaned by laboratory and clinical research devolves upon the general practitioner. Indeed he has opportunities which no other worker possesses; opportunities which are essential to the advance of clinical medicine. He has the advantage of daily and intimate contact with his patients, as well as knowing them personally, their families, and their environment. His is the opportunity to determine the importance of minor symptoms as indicators of future physical incapacity. In the field of clinical allergy, it is his opportunity to detect allergic diseases in their incipiency, preventing thereby their inevitable chronicity and attendant disablement.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol X December, 1937 No. 12

THE Tuberculin Test should be routinely used by every general practitioner. This is the unqualified recommendation made by all outstanding tuberculosis physicians. The general use of the Tuberculin Test will help to diagnose the many cases of early symptomless tuberculosis that now escape discovery. It directs the attention of the physician to the hidden foci of infection that so often go unnoticed to the detriment of families and communities.

Of the two accepted methods of giving the Tuberculin Test, the intracutaneous, intradermal method (Mantoux) is more accurate in that a known amount of tuberculin can be given and the dose increased if desired. For this reason, a slightly larger number of reactors can be found than is possible with the cutaneous (Pirquet) technic.

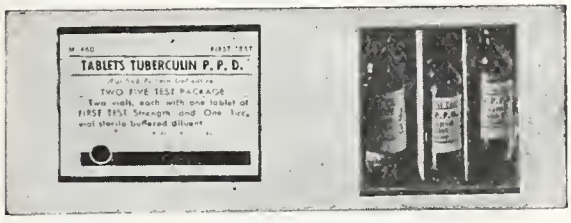
THE TUBERCULIN TEST

The following material has been used as an exhibit prepared by the National Tuberculosis Association for the meeting of the American Medical Association at Atlantic City in June 1937. It shows the simplicity of the Tuberculin Test and furnishes graphic evidence of the advantage of P.P.D. (Purified Protein Derivative) over O.T. (Old Tuberculin).

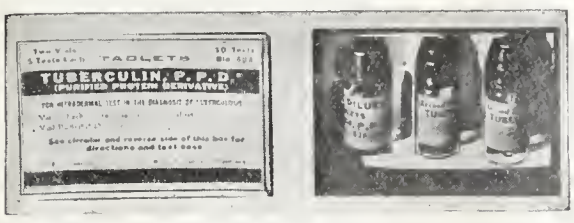
TUBERCULIN TESTING requires little equipment.

1 cc. tuberculin syringe
26 gauge platinum needle of ½" length

TABLETS TUBERCULIN P.P.D.
are always ready in uniform strength for immediate use.



FIRST STRENGTH



SECOND STRENGTH

Available in 5, 10, 20, 100 and 500 test packages. Two commercial firms, Parke Davis and Company and Sharp & Dohme at present hold a U. S. Government license for the distribution of P.P.D.

PREPARING FOR TUBERCULIN TEST

needle is inspected for sharpness

NEEDLE IS FLAMED

The proteins that form the active part of tuberculin are heat resisting to a considerable degree, hence flaming is preferable to boiling.

TUBERCULIN P.P.D. SOLUTION IS EASILY AND QUICKLY PREPARED

DRAW sterile buffered saline diluent into sterile tuberculin syringe.

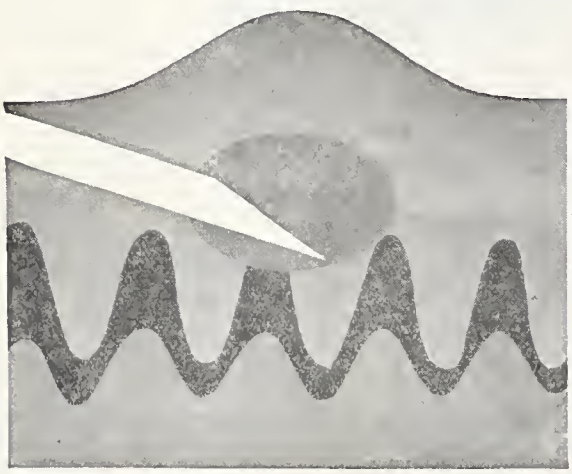
TRANSFER diluent with aseptic precautions to vial containing tuberculin tablet and dissolve.

MAKING THE INJECTION

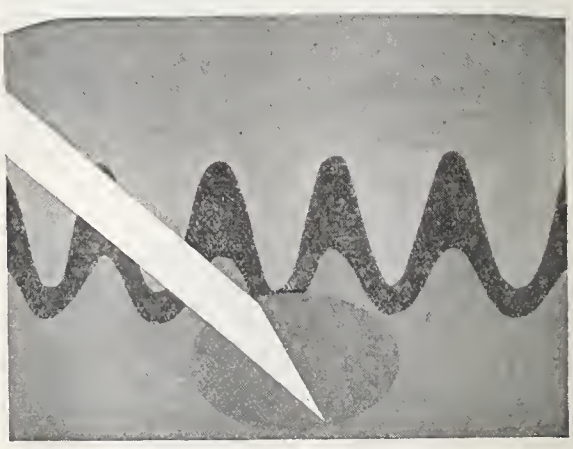
Cleanse flexor surface of forearm with 95% alcohol.

Needle is inserted intradermally (intracutaneous) Opening of needle faces up.

INSERTING NEEDLE



RIGHT—intradermal.



WRONG—subcutaneous.

No local reaction may appear and general febrile reaction may result.

INJECTION COMPLETED

Inject 0.1 cc. of tuberculin dilution.

If this is done correctly a small white bleb will rise over the needle point.

READ TUBERCULIN TEST

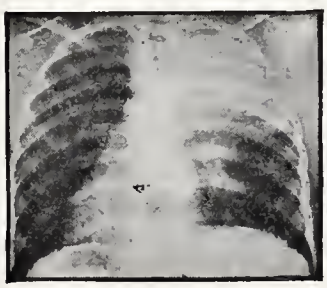
48 hours after injection

NEGATIVE REACTION

Negative Reaction. No tubercle bacillus infection present, tuberculosis may be ruled out. However, if reaction following weak-strength (first) dose is negative, test should be repeated with stronger (second) dose. Sensitiveness to tuberculin may be absent in acute miliary or generalized tuberculosis and during some acute infectious diseases such as measles and whooping cough.

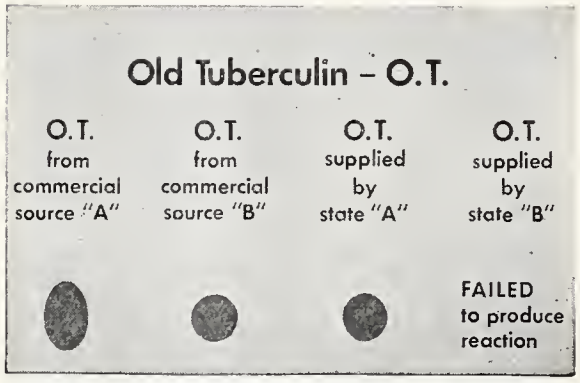
Positive Reaction. Tuberculosis infection present. Redness is of less significance than the swelling. When in doubt pass finger over the tested area, as the induration caused by the edema can sometimes be felt when it does not produce an elevation that can be seen.

POSITIVE REACTORS
should have a Chest X-ray.

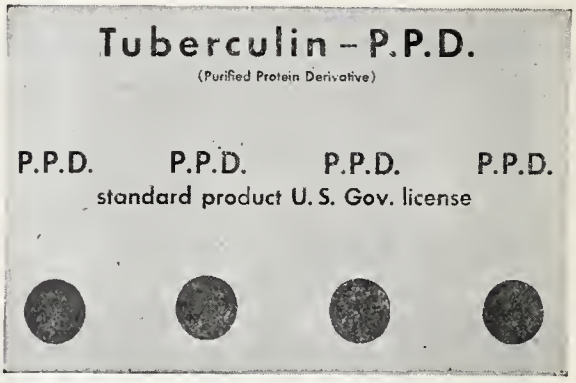


POSITIVE REACVTION

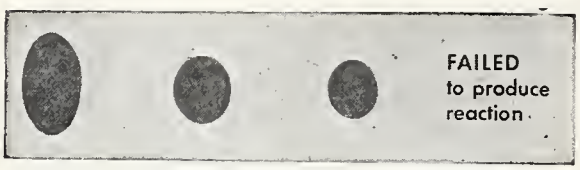
COMPARING REACTIONS FROM O.T. AND P.P.D.



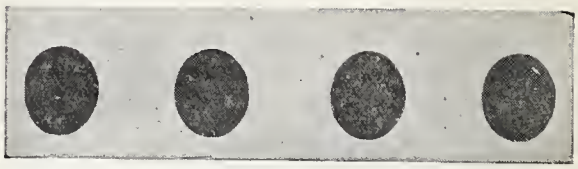
Low Sensitive Reactors



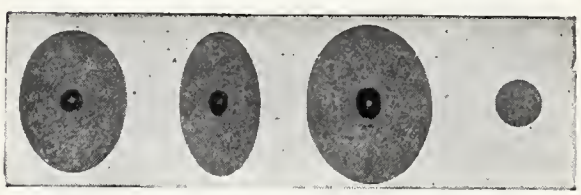
Low Sensitive Reactors



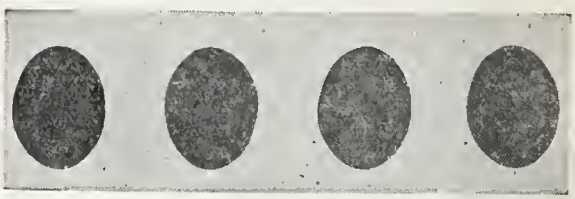
Medium Sensitive Reactors



Medium Sensitive Reactors



Highly Sensitive Reactors



Highly Sensitive Reactors

Preparations of O.T. vary widely in strength and hence reactions are not comparable

Dilutions of P.P.D. are of uniform strength and hence reactions are comparable

Each shaded area represents relative size of tuberculin reaction from identical dosage of O.T. and P.P.D. Black spots represent necrosis.

RESOLUTION

WHEREAS, Dr. Edward Turner Bramlitt, a member of the Hot Spring County Medical Society passed away on December 18, 1937.

WHEREAS, Dr. Bramlitt was a man of unlimited talents, both as a physician and a citizen, he was congenial, beloved by colleagues and patients alike, a man who had practiced medicine ethically for sixty years. May the memory of this congenial, lovable and noble man ever remain in our minds and hearts.

THEREFORE, BE IT RESOLVED, in session assembled, the Hot Spring County Medical Society express our appreciation of the splendid and untiring services of Dr. Bramlitt to Malvern and Hot Spring County.

BE IT FURTHER RESOLVED that we express our sympathy to Mrs. E. T. Bramlitt and family for their irreparable loss and that a copy of these resolutions be sent to Mrs. E. T. Bramlitt and family, to the Journal of the Arkansas Medical Society and that a copy be spread on the minutes of the Society.

H. L. BROWN, M. D.
MAHLON D. PRICKETT, M. D.
Committee.

COMING MEDICAL MEETINGS.

The Dallas Southern Clinical Society, Dallas, March 14-17, 1938.

Medical Association of the Missouri Pacific Railroad, Houston, March 16-17th.

Arkansas Medical Society, Texarkana, April 18-20, 1938.

American Medical Association, San Francisco, June 13-17, 1938.

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

EDITORIAL

THE ANNUAL SESSION

The scientific program for the Texarkana meeting is completed and presents a fine array of medical talent. The Miller County committees began work early on their plans and have arranged all details with thoroughness. The following list of guest speakers offers an idea of the worth of the scientific sessions: J. H. J. Upham, President, American Medical Association, who will address the scientific session as well as the public meeting; J. Shelton Horsley, Richmond, also to address the scientific and public meetings; M. Herbert Barker, Chicago, "Phases of Renal Edema and Their Treatment;" Charles R. Gowen, Shreveport, "Collapse Therapy in Pulmonary Tuberculosis;" Alexis Hartman, Saint Louis, "Present Status of Sulfanilamide Therapy for Severe Infections in Infants and Children;" D. H. O'Donoghue, Oklahoma City, "Fractures of the Elbow;" Arthur G. Schoch, Dallas, "The Diagnosis and Treatment of Early Syphilis;" N. L. Miller, Oklahoma City, "Allergy in General Practice;" Fred Taussig, Saint Louis, "Controlling the Size of the Family," and Roland Klemme, Saint Louis, "Diagnosis and Treatment of Brain Tumors." Plan now to be in Texarkana April 18, 19 and 20th.

MEDICAL CARE FOR ALL THE PEOPLE

Under the leadership of many county medical societies, and with the approval of state medical societies and in accordance with the actions of the House of Delegates of the American Medical Association, certain plans for the provision of medical care to the indigent and to those of a low-income status have been established in various sections of the country. These plans are many in number and have been fully reported on by the Bureau of Medical Economics in order that other sections might judge their value as applied to the particular problems of another locality.

At the 1937 annual session, the American Medical Association reaffirmed its willingness to do its utmost today, as in the past, to provide medical service for those unable to pay either in whole or in part for such service. The organization also reaffirmed its willingness, on receipt of direct request, to cooperate with any governmental or other qualified agency in the promotion of such plans. Thus far no call has come from any governmental agency for the cooperation of the American Medical Association.

At the last meeting of the American Public Health Association the importance of determining and meeting the needs of those indigent and those partially indigent in relationship to medical care was emphasized. The American Public Health Association thereupon appointed a committee to confer with the Board of Trustees of the American Medical Association with a view to stimulating medical organizations everywhere toward greater activity in this matter. As a result of this conference, the Board of Trustees adopted the following resolution:

Whereas, A varying number of people may at times be insufficiently supplied with needed medical service for the maintenance of health and the prevention of disease; and

Whereas, The means of supplying medical service differ in various communities; be it

Resolved, That the American Medical Association stimulate the state and county medical societies to assume leadership, securing cooperation of state and local health agencies, hospital authorities, the dental, nursing and correlated professions, welfare agencies and community chests in determining for each county in the United States the prevailing need for medical and preventive medical service where such may be insufficient or unavailable; and that such state and county medical societies develop for each county the preferable procedure for supplying these several needs, utilizing to the fullest extent medical and health agencies now available, in accordance with the established policies of the American Medical Association. Be it further

Resolved, That the Board of Trustees of the American Medical Association establish a committee to cooperate with the Bureau of Medical Economics in outlining the necessary procedures for making further studies and reports of the prevailing need for medical and preventive medical services; and that the Secretary of the American Medical Association arrange to develop such activities through the secretaries of state and county medical societies in each instance, urging the formation of special committees in each county and state where committees are not available for this purpose.

Thus is inaugurated one of the most forward steps of organized medicine, an undertaking which will attempt to apply on a national scale the best features of the various plans for the provision of medical service now in effect, utilizing in each county to the fullest extent the resources there available. The tremendous difference in the supplying of medical service in various communities is recognized and further, community surveys are considered as the only working basis upon which needed medical service can be rendered.

The component county medical societies now have a responsibility of magnitude. Theirs is the duty of compiling the required data, arriving at conclusions and suggesting plans and changes which will provide for adequate medical service to all the people of a given community or county. The opportunity to perform constructive and far-reaching work is great. Unquestionably, there is an insufficiency of medical service in many localities. Just where are these? What can be done in the way of their correction? These questions are of interest to the public. The medical profession is now given the opportunity to perform outstanding service by leadership in these surveys. Properly directed and thoroughly carried out by the medical profession, it is certain that satisfactory and practical solutions will be reached.

County medical societies are urged to carefully study the recommendation of the American Medical Association, thoroughly discussing the problem as it applies to their own vicinity and make initial preparations for the conduct of the survey. Full and complete data for the study will shortly reach the county medical societies. There is no need to emphasize that the final results of such a study will directly depend upon the enthusiasm, persistence and vigor of the committeemen selected to handle it.

RESOLUTION

It is with profound regret that we chronicle the passing of one of our members, Dr. G. P. Sanders. Dr. Sanders practiced medicine in Stephens for many years and until his health failed several months ago, was a very active member of our society. As a citizen, he stood high and wielded a good influence; a man who was very active not only in his chosen profession, but in the civic life of his home town and community. He took a great interest in the schools of this county and rendered them great service as a member of the county board of education for many years.

Therefore: Be it resolved, that the Ouachita County Medical Society deplores the loss of one of its most esteemed members, whose memory we will ever cherish as a man whose whole live exemplified the spirit of a life of service.

Resolved, that we respectfully tender the family and relatives of the decreased our most sincere sympathy in their bereavement, and that these resolutions be spread upon our minutes, and a copy sent to the family.

R. C. KENNERLY, M. D.
N. G. PARTEE, M. D.
Committee.

PROCEEDINGS OF SOCIETIES

Howard-Pike County Medical Society has elected the following officers: President, T. F. Alford, Murfreesboro; Vice-president, J. S. Hopkins, Nashville; Secretary-treasurer, H. H. Holt, Nashville; Delegate, W. M. Gibson, Nashville, and Alternate, W. B. Simpson, Nashville.

Carroll County Medical Society has elected the following officers: President, C. W. Slusser, Green Forest; Vice-president, J. F. John, Eureka Springs, and Secretary-treasurer, D. J. McCurry, Green Forest.

Clark County Medical Society has elected the following officers: President, H. A. Ross, and Secretary-treasurer, Joe W. Reid.

Motion pictures illustrating the radium treatment of oral and cervical carinoma were presented before the January 24th meeting of the Pulaski County Medical Society.

Ashley County Medical Society has elected the following officers: President, J. T. Wood, Crossett, and Secretary, W. C. Riggins, Hamburg.

Phillips County Medical Society has elected the following officers: President, Morriss Henry; Vice-president, W. A. Ellis; Secretary-treasurer, H. H. Rightor; Delegate, W. B. Bruce; Alternate, J. A. King, and Member, Board of Censors, W. C. Russwurm.

Miller County Medical Society has elected the following officers: President, W. D. Smith; Vice-president, W. H. Daubs; Secretary-treasurer, N. D. Daniel; Delegate, B. C. Middleton, L. H. Lanier, and Censor, H. E. Murry.

The Hot Spring County Medical Society has elected the following officers: President, J. M. Norton, Donaldson; Vice-president, W. F. Barrier, Malvern; Secretary-treasurer, W. G. Hodges, Malvern; Delegate, M. D. Prickett, Malvern, and Alternate, E. H. McCray, Malvern.

A. A. McKelvey addressed the January meeting of the Crawford County Medical Society on the control of syphilis.

At the February 1st meeting of the Mississippi County Medical Society the following program was presented: "Treatment of Pylorospasm," T. K. Mahan, and "Fractures—Report of Cases," C. M. Harwell.

F. D. SMITH, Secretary.

Chicot County Medical Society has elected the following officers: President, W. D. Easterling; Vice-president, J. H. Burge; Secretary-treasurer, W. J. Schwarz; Delegate, J. H. Burge, and Alternate, S. W. Douglas.

Grant County Medical Society has elected the following officers: President, C. F. Cole, Prattsville; Secretary-treasurer, Miles F. Kelly, Sheridan, and Delegate, Miles F. Kelly.

The Sebastian County Medical Society was addressed February 8th by J. C. Ogden, "The Management of Upper Respiratory Infections."

L. M. HENRY, Secretary.

Lee County Medical Society has elected the following officers: President, H. L. White, Rondo; Secretary-treasurer, N. C. Hodge; Delegate, C. W. Chaffin, and Alternate, O. L. Williamson.

The Tri-County Clinical Society met January 28th at Prescott for the following program: "The Role of the X-ray in Some Chest Conditions," G. E. Cannon, Hope; "Some Problems of the New-Born," Sam Phillips, Little Rock; "Empyema Thoracis," Harvey Shipp, Little Rock.

J. W. BRANCH, Secretary.

The Ouachita County Medical Society met in dinner session at the Camden Hospital February 3rd. The following program was presented: "Arkansas: the Present Haven for Quacks," S. A. Thompson, Camden; "Rheumatic Disorders," Euclid Smith, Hot Springs National Park, and "Fever Therapy," H. King Wade, Hot Springs National Park.

Union County Medical Society has elected the following officers: President, W. S. Riley; Vice-president, J. K. Sheppard; Secretary-treasurer, H. J. Mayfield; Delegates, B. L. Moore, D. E. White, and Alternates, L. L. Purifoy, G. C. DeBolt.

The Lawrence County Medical Society met with W. S. Kendall at Strawberry, February 8th for the following program: "The Injection Treatment of Hernia," J. C. Land, Walnut Ridge, and "The Treatment of Pneumonia," J. F. Jackson, Walnut Ridge.

CHAS. D. TIBBELS, Secretary.

The Desha County Medical Society has elected the following officers: President, J. H. Hellums, Dumas; Secretary-treasurer, H. T. Smith, McGehee, and Delegate, H. A. Rands, Dumas.

The Pulaski County Medical Society was addressed February 7th by F. Walter Carruthers, "A Plea for Better Reduction of Fractures of the Pelvis."

E. H. WHITE, Secretary.

White County Medical Society has elected the following officers: President, S. J. Allbright; Vice-president, C. M. Peeler; Secretary-treasurer, A. J. Dunklin; Delegate, S. J. Allbright, and Alternate, F. P. Hardy.

Nevada County Medical Society has elected the following officers: President, A. S. Buchanan; Vice-president, J. B. Hesterly; Secretary-treasurer, R. P. Hughes; Delegate, J. B. Hesterly, and Alternate, O. G. Hirst.

Drew County Medical Society has elected the following officers: President, J. S. Wilson; Vice-president, J. P. Price, Jr.; Secretary-treasurer, Van T. Binns; Censor, Stanley M. Gates; Delegates, J. S. Wilson, J. P. Price, Jr., and R. D. Dickens.

The Faulkner County Medical Society was addressed February 17th by F. Walter Carruthers, Little Rock, "Fractures," and J. S. Levy, Little Rock, "Hypertension."

J. S. WESTERFIELD, Secretary.

Pulaski County Medical Society was addressed February 21st by H. Fay H. Jones, "Diagnosis of Urologic Conditions" (motion picture).

E. H. WHITE, Secretary.

Clay County Medical Society has elected the following officers: President, O. B. Clopton, Rector; Vice-president, J. B. Futrell, Rector, and Secretary-treasurer, J. E. McGuire, Piggott.

Pope-Yell County Medical Society has elected the following officers: President, R. L. Smith; Vice-president, Walter Cale, and Secretary-treasurer, Roy I. Millard.

The annual banquet session of the Johnson County Medical Society was held at Clarksville February 10th with 64 guests and members present. Speakers were: A. C. Kirby, Little Rock, "Immunization Therapy in Children," and Adj. Gen. Daniel Byrd, "The Interdependence of All Peoples." The meeting closed with a moment of reverence for the late W. R. Hunt, Sr.

G. R. SIEGEL, Secretary.

THINK NOTHING OF IT!

There were only 944 deaths from poliomyelitis in the United States in 1935, but there were 2,355 deaths from scarlet fever and 3,495 from measles. But, what is measles?

Another thought gives us the fact that there were 23 deaths from smallpox as against 3,325 deaths from typhoid fever. Following through, diphtheria showed a total number of deaths of 3,620, where the deaths caused from whooping cough totaled 4,293. But again we say "Oh, it's just whooping cough."

—Bergen County (N. J.) Med. Soc. Bulletin.

The estimated loss of life this year will be nearly forty thousand with a million and a quarter disabling accidents. At this rate, it means that one out of every twenty in the United States will be killed or injured in an automobile accident in the next five years. . . . It ought to be our personal problem, because it means one out of twenty in our family or relatives, one out of twenty of our social associates, or one out of twenty of our colleagues will meet death or will be injured within this time by an automobile.

As a professional problem, this condition ought to be included in our program of preventive medicine.

—The Wisconsin Medical Journal.

PERSONALS AND NEWS ITEMS

G. E. Cannon, Hope, was a member of the 7th cruise congress of the Pan-American Medical Association, addressing the general surgery section on "Diagnosis of the Acute Abdomen."

Max McAlister has been assigned as health officer for Benton County.

S. C. Fulmer, Little Rock, addressed the Fort Smith Rotary Club on "The University of Arkansas School of Medicine" January 26th.

Speakers before district conference of the American Legion January 23rd were: J. L. Merrell, L. H. McDaniel, at Walnut Ridge, and L. J. Kosminsky at Camden.

Dr. and Mrs. E. G. McCormick, Prairie Grove, celebrated their 54th wedding anniversary February 10th.

Elizabeth Fletcher, Little Rock, has been appointed psychiatrist to the Pulaski County Juvenile Court.

O. C. Melson, Little Rock, addressed the Association of Cotton Belt Railroad Surgeons at Texarkana January 18th on "Significance of Acute Upper Abdominal Pain." W. T. Lowe, Pine Bluff, presented the presidential address.

The following officers have been elected by the Staff of Saint Vincent's Infirmary, Little Rock: President, D. A. Rhinehart; Vice-president, Paul L. Mahoney; Secretary-treasurer, Hoyt R. Allen, and Chief of the Department of Obstetrics, Clyde D. Rodgers.

James M. Kolb, who has been on duty with C. C. C. camps for the past two years, has returned to active practice at Clarksville.

R. T. Henry, Springdale, and Jeff Baggett, Prairie Grove, have been elected to the executive committee of the Washington County Wildlife Society.

Dr. and Mrs. W. L. Sadler, Little Rock, spent a January vacation in Florida.

A. W. Cox and W. B. Connolly have been elected members of the Board of the Helena Hospital.

R. C. Kennerly recently addressed the Camden Lions Club on "Public Health."

S. A. Thompson, Camden, has been elected president of the First Federal Savings and Loan Association of that city.

R. J. Turner, Fayetteville, recently addressed the Bentonville Rotary Club.

S. C. Fulmer, Little Rock, attended the annual conference on medical education and licensure at Chicago February 14th.

Val Parmley, Little Rock, has been reappointed Chairman of the Southern Section of the American Congress of Physical Therapy.

Martin C. Hawkins, Jr., addressed the 1938 Pan-American Cruise Congress on "Gangrene of the Small Intestine Following Obstruction."

A. M. Washburn recently addressed the public health nurses of northwest Arkansas at Fort Smith on "Tuberculosis Control."

H. E. Mobley has been elected president of the Morrilton Federal Savings and Loan Association.

The many Arkansas friends of Dr. F. F. Young, physician-in-chief of the Fenwick Sanitarium, Covington, Louisiana, will be pleased to hear of his appointment as a member of the advisory committee to the state hospital director of Louisiana. Dr. Young was also recently elected president of the St. Tammany Parish Medical Society.

J. W. Branch has moved into his new clinic building at Hope.

O. L. Williamson, Marianna, has been appointed on the Farm Tenancy Board.

J. B. Jameson is constructing a medical building at Camden.

The Pre-Medic Club of the University of Arkansas was addressed during February by D. W. Goldstein, Fort Smith, "Syphilis," and R. J. Turner, Fayetteville, "The State Health Department."

H. E. Mobley has been elected a director of the Morrilton Chamber of Commerce.

In attendance at the Houston conference of the American College of Surgeons were: A. S. Buchanan, Prescott; Paul Autry, Little Rock; G. E. Cannon, Hope; A. D. Cathey, El Dorado; H. Fay H. Jones, Little Rock; Fred Krock, Fort Smith; H. Moulton, Fort Smith; C. L. McNeil, Rogers; Joe F. Shuffield, Little Rock; W. Decker Smith, Texarkana; A. H. Tribble, Hot Springs National Park, and D. E. White, El Dorado. Elected to the state committee were: E. F. Ellis, Chairman, Fayetteville; H. Fay H. Jones, Little Rock, Secretary; Joe F. Shuffield, Little Rock, Councilor, and H. Fay H. Jones, Governor.

J. N. Compton, Little Rock, has been elected a Fellow of the American College of Physicians.

Frank Vinsonhaler has been elected president of the Little Rock Columbia University Alumni.

MARRIED—At Little Rock, February 9th, Raymond C. Cook and Miss Mary Eleanor Sims.

Thos. Douglass has been elected chairman of the Ozark chapter of the American Red Cross.

Allan A. Gilbert has been elected chairman of the Washington County Red Cross chapter.

R. M. Eubanks has been appointed a member of the Little Rock Civil Service Commission.

J. H. Hellums, Dumas, has been elected a governor of the McGehee Country Club.

Val Parmley has been appointed director of the crippled children's division of the state department of public welfare.

E. H. White, Little Rock, has been appointed professor of obstetrics in the University of Arkansas School of Medicine.

Ralph Weddington, Fort Smith, recently addressed the Parker School P. T. A. on "Immunization of Children's Diseases."

J. H. Sanderlin addressed the medical reserve officers of Little Rock February 21st on "Service With Medical Detachments."

RESOLUTION

WHEREAS, God in His infinite wisdom has suddenly taken from us our friend and colleague, Dr. George Jackson of Little Rock, Arkansas, and whereas Dr. Jackson was endeared to us by his genial personality, his kindliness and untiring efforts towards organized medicine, was also a leading man in his chosen profession in addition to being a tireless civic leader.

THEREFORE, BE IT RESOLVED, That the Chicot County Medical Society in session assembled, express our appreciation for the noble work that Dr. Jackson has done among, and for us, and that we recommend to the members of this society that they follow the high ethical standards which Dr. Jackson unfailingly followed; and,

BE IT FURTHER RESOLVED, That we express our sympathy to Mrs. George Jackson for her irreparable loss, that a copy of these resolutions be sent to Mrs. George Jackson, that a copy be spread on the minutes of this society and that a copy be sent to the secretary of the Arkansas Medical Society.

W. J. SCHWARZ, M. D.
S. W. Douglas, M. D.

YOUR HEALTH!

The American Medical Association's radio program broadcast each Wednesday afternoon from 1 to 1:30 p. m., central standard time, over the red network of the National Broadcasting Company, will present the following subjects: March 2nd, "Water, Waste and Sanitation;" March 9th, "Protecting Perishable Foods;" March 16th, "Keeping Books on Health;" March 23rd, "Catching Disease from Animals."

OBITUARY

HARVEY SHEPHERD THATCHER, aged 52 years, died of sulphuric acid poisoning at Little Rock January 20th. Born January 18, 1885 at Utica, Ohia, he graduated from the University of Chicago School of Medicine in 1917, subsequently teaching in this institution for several years, later becoming connected with Bellevue Hospital and Columbia University, New York, as clinical instructor in pathology. He had also served as assistant professor of pathology at Ohio University. During the World War he served with the medical corps of the French army, entering service prior to the declaration of war by the United States. Since 1936, he had been professor of pathology at the University of Arkansas School of Medicine. In the Southern Medical Association he was most active, being councilor from Arkansas, secretary of the section on medical education and chairman of the section of pathology at the time of his death. In addition to his membership in the Pulaski County Medical Society and the Arkansas Medical Society, he was a fellow of the American Medical Association, and a member of the American Association of Pathologists and Bacteriologists and of the International Association of Medical Museums. Surviving relatives are his wife and two daughters.

GEORGE HOMER BUFFINGTON, aged 69 years, died at his home in Decatur January 24th of heart disease. Born in Muncie, Indiana, March 31st, 1869, he received his public school education in the school of Pleasanton, Kansas, and graduated from the Keokuk Medical College in 1900, first practicing at Pleasanton for one year, then moving to Decatur where he practiced for 18 years. Subsequently he moved to Gravette, where he twice served the city as mayor. Returning to Decatur in 1928, he served as president of the Bank of Decatur in addition to carrying on his medical practice. In addition to membership in the Benton County Medical Society and the Arkansas Medical Society, he was a member of the George J. Jenkins Medical Society of Keokuk, Iowa, of the Gravette Masonic lodge and of the Pleasanton, Kansas, Christian church. Surviving relatives are his wife, a son and a brother.

GEORGE F. JACKSON, aged 49, died in a Little Rock hospital January 25th of heart disease. Born in Joplin, Missouri, May 28, 1888, he received his preliminary education in the public schools of that city, graduated from the Eclectic Medical University in 1911 and began practice in Little Rock. In 1927 he limited his practice to dermatology, and held staff appointments as dermatologist to Saint Vincent's Infirmery, Baptist State Hospital, Arkansas Children's Home and Hospital, Missouri Pacific Hospital and to the hospital association of the Rock Island Railroad. Since 1925 he had been medical director of the Pyramid Life Insurance Company. Named commissioner of the Little Rock Police and Fire Departments in 1933, he had continued to serve in that capacity and in 1936 he was appointed medical referee for the Municipal Water Works. Other interests included membership on the board of directors of the Little Rock Boy's Club, membership in various Masonic bodies, a vestryman for the Christ Episcopal Church and a director of the Physician's Business Bureau. In addition to membership in the Pulaski County Medical Society and the Arkansas Medical Society, he was a fellow of the American Medical Association and a member of the Radiological Society of North America. He is survived by his wife and mother.

FLEMING JAMES O'CONNOR, aged 53, Little Rock, died February 3rd of a heart attack. A graduate of Tulane University of Louisiana in 1909, he had practiced at Monticello prior to moving to Little Rock in 1933. During the World war he served with the army medical corps and held commission as lieutenant-colonel in the reserve. He retired from active practice in 1933. He was a member of various Masonic bodies, the Baptist church, the Sigma Alpha Epsilon and the Phi Chi fraternities. Surviving relatives are his wife and a sister.

WILLIAM W. YORK of Ashdown, aged 63 years, died in a Texarkana hospital February 3rd of injuries sustained in an automobile wreck that day. Born in Water Valley, Mississippi, March 14, 1875, he graduated from Memphis Hospital Medical College in 1901 and was married to Miss Lucy Owens Coulter, who survives him, on December 9th, 1904. He was a member of various Masonic bodies and of the Methodist church. A member of the Little River County Medical Society, he was active in organized medicine, having served as county society officer and in the House of Delegates of the Arkansas Medical Society. He served two terms as a member of the State Medical Board of the Arkansas Medical Society. In addition to his wife, he is survived by a son and two daughters.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary, Texarkana.

Dear County and District Auxiliaries:

There are just two more working months in our auxiliary year and so far as I know only two auxiliaries have contributed to our Student Loan Fund. For the second time the Southeast District was the first to send in their contribution.

Please don't think that just because this fund has been running on for a period of years that we need not raise any more money, or at most not much each year. It is very disappointing to have to turn down an earnest plea for help from a worthy man because we haven't the necessary amount in the treasury. Twice this year I have sent out an s. o. s. to the boys who owe us urging them to make a payment immediately so we could help someone, and I am glad to say the needs were met on time.

State Board exams are coming on and later commencement, when we receive many requests for those last few dollars needed to put a mind at rest so it can concentrate on finals. How can a man study when he is wondering how in the world he is going to get the money to pay for his picture, diploma and cap and gown? After four years of hard work a fellow ought to have the privilege of graduating with all the fixings!

Of the 29 loans made to students who graduated before 1937, all have been paid or are being paid except two, and I am sure one of those will be paid. If we should lose one out of 47 loans, that would not be a bad percentage.

I have just finished nine letters to students graduating last year whom we aided and who are or will make monthly payments on their notes.

Please let me urge you that you do your earnest best to add to our loan fund at this time and make yourself and some one else happy.

Sincerely yours,

(Mrs. Chas. E.) ILSE F. OATES.

January 27, 1938.

A beautiful luncheon was given January 18th in the main dining room of Hotel Grim by the wives of the Texarkana surgeons of the Cotton Belt Hospital staff, complimenting the wives of the visiting surgeons, who were here to attend the annual meeting of the Cotton Belt Railway Surgeons' Association.

The luncheon table was centered with an oblong mirror, garlanded with yellow acacia and plumosa, upon which was placed a crystal epergne, filled with blue iris, red anemones, ranunculus and plumosa, with the red base garlanded with yellow daisies. At either end of the table were placed smaller epergnes decorated the same as the centerpiece with crystal candelabra holding tall yellow tapers, completing a beautiful effect.

Mrs. William Hibbitts, wife of the chief surgeon of the Cotton Belt Hospital, was presented a corsage of white split carnations from the wives of those attending.

Out-of-town guests included Mrs. W. T. Shell, Corsicana, Texas; Mrs. E. D. McKnight, Brinkley, Ark.; Mrs. S. G. Seabrook, Pine Bluff, Ark.; Mrs. Charles R. Gowan, Shreveport, La.; Mrs. Joe Heard, Shreveport, La.; Mrs. J. H. Dorman, Dallas, Texas; Mrs. J. H. Daniels, Gilmer, Texas; Mrs. W. G. Hancock, Rison, Ark., and Mrs. George B Alcott, Wimer, Ark. Wives of Texarkana surgeons present included Mrs. Wm. Hibbitts, Mrs. John T. Porter, Mrs. W. A. Hutchinson, Mrs. A. H. Mann, Mrs. Oscar High, Mrs. T. F. Kittrell, Mrs. T. E. Fuller, Mrs. A. Collom, Mrs. S. A. Collom, Mrs. C. A. Smith, Mrs. J. T. Robison, Mrs. H. E. Murry, and Mrs. A. W. Roberts.

A delightful seated tea, honoring the visiting Cotton Belt surgeons' wives, was given January 18th, by Mrs. Wm. Hibbitts at her home on Wood street.

The reception room of the Hibbitts' home was decorated with white gladioli, while in the dining room the table was covered with a white Venetian lace table cloth and was centered with a crystal bowl, filled with artistically arranged peach gladioli and acacia. Tall orchid tapers in crystal holders completed a lovely effect.

Mrs. S. A. Collom poured tea, and Mrs. H. E. Murry served the ices.

Mrs. Cozia Hynson Case delighted the guests with a program of organ music, after which Mrs. J. T. Robison, in her charming way, reviewed the popular book, "The Citadel," by Dr. A. J. Cronin.

Woman's Auxiliary to the Bowie-Miller County Medical Society met Friday, January 21st, with Mrs. H. E. Longino, with the following co-hostesses: Mrs. J. F. Williams, Mrs. R. R. Robins, and Dr. Frances Spinka. Spring flowers were used in the reception room.

Mrs. N. B. Daniel, president, conducted the business session, during which plans were discussed for the Arkansas Medical Society meeting to be held in Texarkana in April.

Medical current events were given by Mrs. Decker Smith, Mrs. Roy Baskett, Mrs. William Hibbitts, and Mrs. L. H. Lanier.

Dr. Frances Spinka talked on "Achievements of Women in Medical Science."

Refreshments were served to 15 members.

Spring activities of the Auxiliary to the Sebastian County Medical Society were discussed informally, monthly reports were heard, and the president, Mrs. J. S. Southard, announced names of the nominating committee for new offices at the February 14th meeting of the Auxiliary at the Woman's clubhouse.

The nominating committee is composed of Mrs. B. Wayne Freer, Mrs. Walter Eberle and Mrs. Fred H. Krock, who will report at the April session. The Auxiliary also adopted a motion to contribute $10.00 to the state student loan fund, as has been customary for several years.

Among the future events discussed were the program by the public relations committee, composed of Mrs. I. F. Jones, Mrs. B. Wayne Freer and Mrs. Thomas P. Foltz; and a proposed joint session of the Sebastian and Washington county auxiliaries in March. Mrs. Charles T. Chamberlain, a new member, was introduced.

The annual public relations meeting will be held this year at Rogers school, March 4, in connection with the Rogers Parent-Teacher program, and will feature the showing of a film on the control of syphilis entitled, "For All Our Sakes."

The business session was held in connection with a luncheon, and with a Valentine and costume program presented by a trio of pupils of Ella Allen.

The youthful entertainers were Carol Sue Perry, Georgie Ballard and Wilma Risner. Carol Sue, four years old, appeared in two solo numbers, "In Our Little Wooden Shoes," and "I've Got Dixie in My Soul." Wilma, five years old, sang a tribute to mothers, "Old-Fashioned Lady," and appeared with Georgie Ballard, also five years old, in a duo number entitled, "Tying Apples on the Lilac Tree." Georgie sang "There'll Be No War on the Nursery Floor," and responded with an encore. Three of the compositions, "Old-Fashioned Lady," "I've Got Dixie in My Soul," and "There'll Be No War on the Nursery Floor," were written by Mrs. Allen, who played the piano accompaniments for the young entertainers.

Hostesses for the day were Mrs. Arthur F. Hoge, Mrs. Raymond Smith and Mrs. W. F. Rose. Decorations of the luncheon table were suggestive of Valentine Day, and emphasized a red and white color scheme. The center piece was of azelias, stock and snapdragons.

Present for the meeting were Mrs. Southard, Mrs. M. E. Foster, Mrs. Everett Moulton, Mrs. B. Wayne Freer, Mrs. A. A. Blair, Mrs. John Redman, Mrs. C. S. Bungart, Mrs. Charles T. Chamberlain, Mrs. H. C. Dorsey, Mrs. S. P. Stubbs, Mrs. Minnie U. Fuller, of Magazine, Mrs. G. G. Woods, of Huntington, Mrs. W. R. Brooksher, Jr., Mrs. C. S. Means and the hostesses.

MRS. W. F. ROSE,
Publicity Chairman for the Woman's Auxiliary of the Sebastian County Medical Society.

THE FRANKLIN COUNTY CORRESPONDENT

January 26th.

To the Editor:

I enclose report of Franklin County Medical Society with dues of five members. I am pretty sure of one more but he has not sent his check and think I will be able to send in another. I hope to get them in in time for enrollment before state society meeting.

I believe I sent you a report of our banquet. Since the first of the year my correspondence has more than taxed my capacity. I may catch up some time.

Our members are highly pleased with the success of our annual banquet and appreciate the honor of the attendance of our state secretary. We were sorry you got sick and had to hurry off home and could not give us one of your notable speeches.

I have read the Sunday Arkansas Gazette relating to the state medicine program. Evidently it is right on us and what are we going to do about it?

We hope during this year to have some better meetings of our Franklin County society. All the members are too lazy to write papers—except me, and I am the laziest one of the bunch. Can you suggest some kind of a hypo which will inject life into this bunch? Of course they might read the Journal which does contain inspiration.

I have considered that the country doctor does not make full use of the large number of charity cases he cares for to develop his own skill and acumen as does the hospital man. Of course it involves a large amount of work and time is short. Greater use of laboratory facilities is desirable and greater industry. Perhaps in the Journal you might suggest how we could do it better.

Thank you for a first-class, well-edited Journal.

With kindest regards,

Yours very truly,

THOS DOUGLASS.

THINGS WELL WORTH THINKING ABOUT

Organize a Medical Service Bureau as a part of your county society. This bureau to aid your patients in determining their ability to pay for medical service and to advise them how to budget these expenses.

Organize a Speakers' Bureau and provide opportunity to gain experience in effective public speaking. Los Angeles county is conducting a most commendable as well as successful Speakers' Bureau. We need better and more public speakers.

Plan joint meetings with your county dental, health and bar organizations. Better understandings will result.

How about another summer picnic or field day? And make it a day for inter-county fraternization.

How about checking up on the social service work of your local and county hospitals for the purpose of ascertaining whether they are functioning efficiently and effectively.

Let the people of your county learn about the total amount of free and charity work done by your members a year. As a rule this amount exceeds the total charity contributions in your county but the people are not aware of this fact. Publicity is indicated.

If these suggestions are initiated and sustained in your county, your society will experience meetings made more valuable by an aroused interested membership. Someone has to pitch the first ball. Why not you?

—Calif. & West. Med.

SPRING MEDICO-MILITARY SYMPOSIUM

The annual Spring Medico-Military Symposium, sponsored by the Kansas City Southwest Clinical Society in conjunction with the medical department Seventh Corps Area will be held at the Kansas City General Hospital, Kansas City, Missouri, March 28, 29, 1938. This is a meeting devoted to medical subjects of military interest as well to which the entire medical profession is invited.

Medical reserve officers will gather information which will be of value in event of war, a not impossible eventuality, much that will be of value in his practice and receive credits which will apply on his advancement.

Guest speakers will include Dr. J. Albert Key, professor of clinical orthopedic surgery, Washington University Medical School, St. Louis and Dr. Ovid O. Meyer, professor of medicine University of Wisconsin School of Medicine, Madison.

The Kansas City Southwest Clinical Society invites the physicians of the Southwest to reserve March 28th and 29th to attend this meeting.

RANDOM THOUGHTS OF THE SECRETARY

January 18th. Seated about the festive board of the Franklin county annual banquet session, we become acutely aware of digestive tract disturbances, which increase in such severity as to call for our immediate departure from the scene, leading to a full discussion of our inability to take it as of yore.

January 20th. As leading speaker at a surprise celebration, the toastmaster facetiously refers to certain unworthy attributes of the honored guest, the antithesis of which had constituted the base for our eulogistic remarks, and thereby destroys our talk, leaving us to strict extemporaneous remarks, but with confusion sufficient to evoke the comment that for once we have been observed completely speechless, as well we were.

January 21st. With Satevepost luck, the smallpox health talk of the Public Relations Committee is published in local papers coincident with a news story of six cases at a nearby village.

January 22nd. The bachelors entertain the cotillion club, Chamberlain having essayed to dodge the financial responsibilities of the occasion by becoming a benedict between committee meetings. Mrs. Charlie is introduced to the medical profession present and discovers that there are no ethical restrictions when it comes to revealing to her certain of Charlie's past performances. Too, is heard the reason for the start of the honeymoon at Covington.

January 23rd. We journey to Texarkana, fourteen hours on a train, two and one-half hours with the Miller county committees, and never a more enthusiastic crowd. Rain falls with constancy throughout the day, giving hours for much meditation as well as affording the opportunity to write a number of articles for the press on popular health subjects. Highway traffic is conspicuous for its absence and even station loafers appear to be at home under sheltering roofs. We have ample opportunity to observe the beauties of rain, its wind-blown crystal drops, the gathering of little rivulets from the hillsides, tumbling over the crest of the earth in their tumultuous passage, slowly, and with dirt discolored, winding along in wide ditches and spreading out in smooth, unruffled covering on low pastures.

January 24th. We place votive offering for the duodenal ulcer patient referred to us for gastrointestinal study this morning, but who most graciously had his perforation at home last night and not on our floroscopic table this morning.

January 26th. We become guest speaker for the Clarksville Lions Club, enjoying the fellowship that attends these civic gatherings, and view much that contributes to the beauty of this city, notably the new hospital under construction. Tarrying in Ozark as we return, we find Tommy Douglass engaged in the study of pulchritude but sufficiently complaisant to hand over his secretary's report and dues.

February 3rd. This day death overtakes a young woman, the hapless victim of artful assurance of glib quackery, the whole abetted by the misguided civic-mindedness of some worthy citizens.

February 5th. Guests of the Fount Richardsons' we first enjoy another of those good Washington Hotel dinners, our third in ten days, then to the exciting basket ball game, the newer rules not contributing to the game in our opinion. Amis with a candid camera stalks about the stands and this means we must once more enthuse over prints in days to come.

February 8th. This evening Ogden discusses respiratory tract infections before the county society, taking a crack at X-ray therapy. Well, we can now crack back although we could not then—we were not listening to what he was talking about.

February 11th-12th. Gathering with over 200 radiologists in Kansas City, where the usual good meeting is well put on by the local men and Mistresses Lockwood, Duncan, Allen and Castles see that the ladies (and the men) have entertainment which leads to general spirit of gayety. A number of us become absorbed in the collection of charms attached to mixing spoons, discussions of roentgen procedures being interspersed with "have you a Popeye?" and "Did you get an angel?" This last charm apparently quite few in numbers which we hope is merely a happenstance and not indicative of trends in Kansas City.

February 16th. This day a hearty letter from Wootton inclosing a poetic composition of his, not without value as a rhyme, but of far more worth to us as a harbinger of a high morale and at that, we, too, are most happy.

BOOK REVIEWS

The 1937 Year Book of General Surgery. By Evarts A. Graham, A. B., M. D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-Chief of the Barnes Hospital and of the Children's Hospital, St. Louis. 827 pages, illustrated. Chicago: The Year Book Publishers.

This book follows admirably the pattern set by the larger popular book on general surgery recently published. The first chapter, on anesthesia-analgesia, is easily worth the price of the book. The medical profession has learned to know and to value the work of Dr. Graham in surgery, and all of his writings are easily understood. The space devoted to wound healing, the the chest, bones and fractures, stomach and intestinal surgery, the gallbladder and bile ducts, hernia and the spine and cord all deserve special mention. The illustrations are clear and the plan of the book generally is readable and instructive, making it a valuable volume to the busy general surgeon.

Principles of Roentgenological Interpretation. By L. R. Sante, M. D., Professor of Radiology, Saint Louis University School of Medicine; Radiologist, Saint Louis City and Saint Mary's Hospital, Saint Louis. Pp. 240. 333 illustrations. Price $5.50. Ann Arbor: Edwards Brothers, 1937.

Written as a text for medical students, this volume is deserving of commendation for its brief, yet thorough discussion of the fundamental principles of roentgenological interpretation. For its size, it is surprisingly comprehensive in contents. The questions which follow each chapter assist the student in his studies. A few minor typographical errors are present which will undoubtedly be corrected in a subsequent edition.

Eyestrain and Convergence. By N. A. Stutterheim, M. D. (Rand), Arts (Staats-Examen, Holland), Part-time Opthalmic Surgeon to the Johannesburg School Clinic, Transvaal Education Department; Late Assistant, Eye Clinic, University, Leyden. Pp. 90. Price: 7 Shillings, 6 pence. London: H. K. Lewis & Co., Ltd., 1937.

The great majority of refractionists pay little or no attention to muscular imbalance as the cause of eye

strain. The author here presents a convincing argument, and backs up his conclusions with numerous case records to convince the reader that certain prism exercises which he advocates relieve many cases of asthenopia. Particular emphasis is applied to weakness of convergence for which the author has coined the word "asthenovergence". He states that "like convergence itself, this asthenovergence is measurable. So is its gradual cure by kinetic treatment." Every ophthalmologist should not only read but study this monograph.

Essentials of Prescription Writing. By Cary Eggleston, M. D., Assistant Professor of Clinical Medicine, Cornell University Medical College, New York City. Sixth Edition, Revised. 155 pages. Philadelphia and London: W. B. Saunders Company, 1938. Cloth, $1.50 net.

This new edition has been revised, with "the elimination of some of the older preparations and the inclusion of certain new ones," as stated in the preface. It is still the excellent volume on this subject that it has always been, and merits a place in the library of every student and practitioner of medicine. A close study of the material in this text would be a step forward in freeing the average physician from complete dependence upon the pharmaceutical houses.

Clinical Reviews of the Pittsburgh Diagnostic Clinic. Edited by H. M. Margolis, B. S., M. D., F. A. C. P. Contributors: H. G. Schleiter, M. D., C. H. Marcy, M. D., C. C. Mechling, M. D., R. R. Snowden, M. D., L. H. Criep, M. D., G. W. Grier, M. D., and H. A. Anderson D. D. S. Pp. 552. Price $5.50. New York: Paul B. Hoeber, Inc., 1937.

This is a series of brief expository reviews, 45 in number, covering in wide range, the diabetic, the arthritic conditions, the psychoneuroses, cardio-vascular diseases, all of which receive careful attention. The subject matter is well condensed and most readable. The definite conviction is obtained that the authors have well informed themselves before attempting their presentations. A carefully-assembled bibliography accompanies each essay. This is a most satisfactory volume for postgraduate instruction of the physician at his reading convenience.

The Complete Pediatrician. By W. C. Davidson, Professor of Pediatrics, Duke University School of Medicine, Second Edition. Price $3.75. Durham, North Carolina: Duke University Press, 1937.

A most amazing essence of important up-to-date information about children, their diseases, growth, development, defects and mental development, truly enclycopedic and covers the whole field of pediatrics. It includes a neurolgic manual, an extensive therapeutic review, an excellent laboratory manual and pediatric nursing. The general arrangement is good with an ingenious system of cross reference which makes possible a most extensive and thorough review in a small volume. The general practitioner will find within its pages what he most wants to know about children and will find it easily and quickly, briefly and tersely stated with nothing important left out. The title page is adapted from Isaak Walton's Compleat Angler and the title, The Compleat Pediatrician, is fully justified. Wider margins would much improve the printed page. It is difficult to avoid superlatives in describing this book. Every doctor will find it priceless.

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HYPOCHONDRIACAL STATES*

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New Orleans

Human beings vary constitutionally in a large measure in their awareness of body sensations. There are those who devote an increasingly greater attention to the pressures, pullings, twistings, stretchings, and minimal aches and pains of normal physiological functions. In these people there is usually found another member of the brotherhood of woe, namely fear. It is fair to say that anyone in the yoke of body concern, driven by self-deception and whipped by the lashes of discontent, is a candidate for a hypochondriacal reaction.

Granted a fertile constitutional soil, how do such deeds of ill health come to grow? There is no better way to illustrate this than to point out a few reactions seen at the different periods of life. It is obvious what a child will do when his mother excuses herself from some social obligation by telephoning to a neighbor that she has a headache, and then goes about her household duties perfectly free from any discomfort. Is it any wonder that this same child has a headache later when he does not wish to go to school or face some unpleasant task? There is no hypochondriacal complaint found in childhood more frequently than headache. A child may pick up such complaints from adults and by nursing them gain the privileges his mother does. Some people may refer to these complaints as products of dishonesty, but are they necessarily? The child, and the adult, too, for that matter, is an imitator, and either can, through imitation, build up a complaint habit which becomes an integrated part of his make-up and personality. Then as years go by and life strains increase in number and frequency, auto-suggestion deceives him and he comes to interpret his discomforts as signs of structural disease. In many people gastro-intestinal complaints are borrowed from "ailing stomachs" and "finicky eaters" in the earlier environment.

A superior intelligence does not preclude the development of these trends, nor does even a medical education. To the contrary, they often foster and intensify them, as you will realize when you think of your patients who were physicians or nurses. There is no reaction in which iatrogeny plays such a large role. In order to study their sensations and symptoms more carefully, and elaborate theories upon them, these patients gather notions from previous interviews with physicians; from conversations with nurses and hospital attaches; and from statements seen in medical books and quack advertisements or heard in radio talks. They read the ads of patent medicine houses assidously and are only too glad to try new remedies suggested by their druggists.

Hypochondriacal reactions are common in people past middle life, especially men. This is the time when children leave home to fight for themselves and death often deprives a man of his wife. Usually the individual is one who has never had many interests outside of his home, work, and a few friends, and when the old order changed he found himself unable to adjust to the new. Reminiscence and progressive self-indulgence then produced a growing web of complaints. It is wise, therefore, to keep a man at this age busy with something constructive.

The experiments of psychologists have shown that if the man in the street is urged to be conscious of his body or some part of it, sensations will arise in that part. Self-suggestion quickly intensifies these sensations. It is clear, therefore, that those of us who are over concerned with our physiological functions will react in the same way when in every day life we are placed in an experimental situation created by nature or brought about by fate.

The home atmosphere of these patients is often heavily charged with complaining, ailing

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and faddism, which of course stimulates self-suggestion. Many such trends develop in the hands of an oversolicitous mother or mate who emphasizes some mild complaint by putting on it in his presence a diagnostic label obtained from some lecture or book. In others the trend may start with an acute illness, when thoughts are naturally focused upon body sensations; then when the organic condition clears up these somatic preoccupations cannot be shaken off. In some patients the same trends that eventually lead to a hypochandriacal reaction may have manifested themselves in interest in athletics and physical training; in special attention to the body's appearance; in the use of cosmetics; and in unusual pride in good health. They may even be behind the choice of a profession or vocation such as medicine, nursing, physiotherapy, social work, laboratory work, barbering or beauty culture. Medical knowledge with suggestibility promotes misinterpretation of the ordinary squeaks and rattle of life.

In the final analysis hypochondriacal reactions are substitutes for healthy ways of dealing with the experiences, disappointments and anticipations of life that go against the grain. The aches and pains are emotionally determined but they are nevertheless disheartening and annoying to the patient, and for this reason he recounts them with great solemnity. A point to be stressed is that he actually experiences the discomforts and pains he describes, and frequently his tears indicate a depressive trend which grows out of a felling he is misunderstood. But he clings to any ray of hope and maintains faith in the medical profession for many years. Some of these patients spurn the advice of a physician who does not patiently and carefully determine the cause of their body misgivings. When a statement is given to the effect that "Absolutely nothing is wrong with you!", yet a placebo or tonic is prescribed, the patient ends up doubting organized medicine at large. If physicians do not refer these patients to colleagues who are more experienced with such disorders, the eventual outcome is obvious. They fall into the hands of quacks who exploit them unscrupulously, only to drop them as soon as their pocketbooks are deflated; but the casualties are charged against us in the eyes of the patients and their friends, who do not fail to say so. Therefore it is the serious duty of every honorable physician to remember that he holds in the palms of his hands, in no small way, the destinies of these people, and also the opportunity to quell the iniquities of charlatans, who, as a rule, are no dummies when it comes to "psychological medicine".

A diagnosis can be made only after many things are considered, first and foremost of which is a good history that covers the individual's background. The singling out of hypochondriasis as a clinical entity is unnecessary. What really counts is a thorough understanding of the pathological trends growing out of body concern. In some cases what on the surface appears to be hypochondriacal may be part of the picture of a prodromal or convalescent state which is based on a definitely physical affair, but one hard to evaluate. The presence of an organic condition does not exclude hypochondriacal trends, nor does the absence of demonstrable findings always justify the assumption of such trends. The trends are frequently confused with chronic anxiety states, because in hypochondriacal patients there is usually considerable anxiety. In other cases the affair is a clinical transition from an anxiety state to a chronic invalid reaction.

Such trends are frequently found in patients who are depressed; this is important because the treatment is different when there is a setting of depression. In many cases there is a dwindling of the sex urge and irregularities or absence of the menstrual flow. In addition there may be sleeplessness and aversion to or false notions about food. These symptoms can become elaborated upon until there are hypochondriacal trends of rather marked degree. In some of these patients delusions of sin and disease are tied up together. In Involutional Melancholia, a depressive reaction occurring in the middle or late years of life and as a rule carrying a more serious prognosis, hypochondriacal delusions are practically always found. As a rule they are nihilistic, the patient denying existence and functioning of certain organs. The prognosis is better when these notions are not present. When hypochondriacal states occur periodically, experience has taught us they may be "equivalents" of a depression, and for all practical purposes such a case should be treated as one of depression. Not infrequently they are grave suicidal risks.

Hypochondriacal trends are frequently the earliest manifestations of a paranoid condition. They are the results of a period of self-analysis in a set and self-centered person, who feels insecure and has difficulty in making concessions. He puts a personal interpretation on remarks that are overheard, and through the same bias comes to believe that the reactions of certain people carry similar meanings and implications. I know

personally of one paranoic who gave the medical profession thirteen to fourteen years' warning with hypochondriacal complaints before she murdered an innocent man.

We see hypochondriacal states in some epileptic patients. They become self-centered, their interests become narrowed, and they progressively devote more attention to the body and its functions.

Many paretics show hypochondriacal trends. They may relate delusions that they have no stomach or brain, or state that the body is disintegrating. These reactions may grow out of fear of syphilitic infection or doubts in the efficacy of specific therapy. I have encountered several of these cases labeled "syphilophobias". I recall a nineteen-year-old boy who, when he developed a small fissure on his lip from dry winds shortly after kissing a questionable young woman, became fully convinced through fear and conscience that he had syphilis. Negative reports on several blood Wassermanns made no impression on him and he ultimately developed a hypochondriacal reaction. Only after two or three years was he able to disengage himself. All of us have seen cases in which a gonorrheal infection served as the nucleus for the development of serious and far reaching hypochondriacal trends.

Organic conditions such as arteriosclerosis and chronic enacephalitis are frequently the basis for these trends, and the hypochondriacal affair may be only a surface manifestation.

Occasionally one finds a patient with a more or less isolated hypochondriacal trend. Here one must not be led to the false assumption that the more complaints the more serious the case. Frequently monosymptomatic cases carry a bad prognosis, and the stated complaint is only symptomatic of a rather stubborn hysterical affair, or an obsessive, paranoid, or schizophrenic reaction. According to one observer, a monosymptomatic condition often appears in immature people, and not infrequently is the result of a disappointment reaction or underlying feelings of inadequacy.[1] As soon as possible one should gain an understanding of the strength and persistency of the trends, and, above all, the kind of personality they are in. Is the human material modifiable or immodifiable? Is the condition symptomatic or is it a reaction in itself?

Before a few principles for management of these cases are outlined, some general facts should be brought to your attention. First, diagnosis and therapy in psychiatric work are so intertwined they cannot be separated; therefore both begin with the first contact with the patient. Second, of all the therapeutic weapons we use with these patients, there is none so powerful as **rapport.** This term is French in derivation and is defined as "harmony of relation" or "accordance". Simply speaking, it is a "oneness" that exists between the physician and his patient. Skillful use of this principle makes some physicians more successful than others. Those who succeed develop and maintain this rapport. What is it built upon and how does it thrive? It is built upon the deportment of the physician, his patience, his open-mindedness, and his thorough and methodical examination. It thrives on a willingness to see the patient's side of the story and an unbiased attitude fostering mutual respect, confidence and understanding. A dictatorial, impatient manner spells gross failure in handling hypochondriacal patients. Another point is this, of all psychiatric patients, there is none who puts one more to task than the hypochondriacal; therefore treatment must be planned not only in a general way, but also tailored to fit the individual case. It must be well organized, thorough and consistent.

Before proceeding with any psychotherapeutic regime, the physician must decide one very important question: Where is the patient to be treated? Many cases can be adequately handled in a private office or out-patient clinic; on the other hand some must be hospitalized.

How shall one then proceed? The first thing to do is get a well defined, clearly understood complaint. The average patient enumerates multiple complaints and the physician must carefully extract those of leading significance, listening patiently and seriously, without preconceived notions or prejudices. When he has the complaint clearly formulated then he proceeds to gather the historical data.

In obtaining this data he singles out the significant complaints and goes back in the individual's life time to the point when each started, getting the facts and experiences associated therewith, and giving special attention to dates. With reasonable insight into human nature, a constructive imagination and a bit of prompting here and there by means of well thought out questions, the physician can gradually build up a connected story. Usually the patient will relate important experiences with which considerable emotion may be associated. He should be allowed to **ventilate** himself with regard to these experiences for this releases pent-up emotions and has definite therapeutic value.

The more he talks the more experiences his associations brings forth, and gradually he comes to see important connections. Often the onset of a symptom is coincidental with an emotional experience, and the patient is given an opportunity to explain why he was stirred in that situation. Frequently when he sees these connections his complaints diminish or disappear, but sometimes a bit of suggestion is needed .

The present illness is followed by the personal history, which covers the time between conception and the onset of his complaints. All pertinent facts concerning birth, development, school, work, sex and marriage, homemaking, responsibility, the rearing of children, habits, interests, religious life, illnesses and financial status are obtained.

A family history is especially important because it reveals the family traits and biological patterns, and whether or not the home atmosphere is one of friction, parental oversolicitude, health concern and complaining. Illnesses and deaths in the family may play a tremendous role in the patient's thinking because of his beliefs about heredity. For this reason his views on heredity should never be overlooked.

The next step is a very careful mental status examination, which makes an appraisal of the depth, degree and malignancy of the trends, determining whether the affair is a reaction in itself or symptomatic of a graver condition.

After the mental status examination is completed, the body structures and physiological functions are studied through a careful physical status examination which puts emphasis on the organs and functions around which the complaints center. I cannot stress sufficiently the care that must be exercised in this part of the work-up and the necessity for getting all the laboratory tests and consultations once and for all, regardless of the number needed. There should be no re-examinations unless absolutely necessary, and even then one should think twice. Repeated examinations destroy the patient's confidence and cripple the effects of suggestion, and so create an added therapeutic problem. To emphasize! Get the physical examination over and rule out once and for all organic factors before proceeding further.

A very important point has now been reached. The physician is ready to give the patient a formulation of his condition in a matter of fact way, free from confusing terminology. Symptoms and complaints organic in nature are discussed frankly and given full importance; those of psychic origin are discussed in terms of experiences in the past and present, and anticipated for the future. The roles played by body consciousness and overconcern are pointed out. Such handling of the case prevents conflict between treatment of organic conditions and the management of problems growing out of personal maladjustment. The patient is led to see just how emotional factors can affect the physiological processes. Each individual symptom cannot be discussed, but the major ones, if handled carefully, serve the purpose. There is no special advantage in showing roentgenograms, electrocardiograms and laboratory reports. After all, it rests with the physician to interpret them, and if the patient has confidence in him this takes care of it self. He is allowed to repeat any opinions which may have been gathered from other medical sources, and this information must be handled tactfully, without open disagreement. Thus the patient's confidence in his medical advisor is strengthened and his symptoms are gradually accepted in terms of life experiences and reactions thereto rather than in a confusing way grown out of medical mismanagement and self-indulgence.

He is requested to return with some close member of the family or a trusted friend, so that a reformulation of his case can be given in the presence of the second party. Needless to state, the explanation does not reveal any confidential material. The two are told that the patient's future happiness rests to a large extent with the family, and that a home atmosphere saturated with conversations about health, complaining and fads militates against efforts to establish good mental hygiene. The family usually welcomes a scientific understanding of the case and with its collaboration many situational handicaps are removed. Since the patient is present during the interview he cannot possibly accuse the family of lack of feeling and sympathy, or hold his complaints as an ax over their heads. He is led to accept their new attitude towards his condition as a constructive part of the treatment.

After this he returns to the physician's office periodically for therapeutic interviews. The physician insists that he keep appointments on the hour, even at a sacrifice. By this means he is taught to evaluate time, often for the first time in his life. During the interviews problems are discussed, but no rehashing of complaints is allowed. In a short time an organized routine can be drawn up, to which he must stick absolutely. His habits of eating, resting, sleeping

and taking recreation must all be considered and balanced, so as to provide a diversity of interests along social, cultural and physical lines. Overindulgence in physical exercise should not be permitted, since it often leads to increased body consciousness, and with the first failure comes a return of the old hypochondriacal trends, or even new ones. This mistake is frequently made, and has for its end result the development of marked ideas of physical inferiority.

If he has regular work and his condition does not demand hospitalization, he should be advised to return to it after encouragement and reassurance. But if he has no employment, efforts should be made to find occupation for him as a volunteer in connection with some community center or civic project. Older patients do well on a planned routine of occupational therapy adapted to their individual needs. It is unwise to attempt treatment of hypochondriacal patients with placeboes or with "rest treatment" in a setting of idleness.

As time passes body sensations can be discussed in terms of sensations which every normal person has, but to which little attention is paid because of more compelling interests in the environment. There should be discussion of sensations of relaxing the muscles preparatory to rest and sleep (the bed may be an important factor); of fatigue; of digestion; of the heart beat; and of those which might arise from poor posture. The bolting of food, chewing and swallowing too quickly, swallowing air, faulty elimination and insufficient rest and sleep are considered and correction of these bad habits is urged. The patient is shown how these normal sensations become aches and pains through suggestion and fear. The effects of tension on the physiological functions, and the situational and personal factors which produce this tension must be carefully and completely explained.

After he has been led to an understanding of his problems and the causes of his symptoms, he must be given additional reassurance and strong suggestion, and urged to put more faith and confidence in his body, even to the point of testing himself. He will soon find that his body serves him better if he does not meddle or muster disturbing thoughts about its normal functions, and because of his wider range of interests it is easier to push aside the troublesome thoughts he does have before they gain alarming intensity. A well rounded life affords him the opportunity to mobilize his best efforts and **re-educate** himself by building habits of sensible living, thinking and feeling, without body observation and threatening apprehensions. Gradually he comes to realize that he can see, hear, eat, exercise, play and relax like other people. With more venturing and repeated successes come the desire and confidence to do more.

Occasionally one encounters patients whose complaints constitute essentially the whole story. Nevertheless there are usually the personality traits of self-centeredness, selfishness, sensitiveness, stubbornness, sympathy seeking, or even martyrdom, which are so common in these people. Discussion of these traits must be in terms of those concrete situations in the patient's own life in which the characteristics were manifested. This is a vital and powerful procedure in such cases, but must be tactfully handled in order to prevent indignation and temper flare-ups, which seriously impair rapport.

Some hypochondriacal patients will continue to return for months and years, or even for the rest of their lives, but this is no cause for discouragement. Efforts to externalize their interests and re-educate them are never in vain, and results in many cases are striking. An emotional rehabilitation may take a long time, but if the patient is led to develop more self-confidence and to function more efficiently, and is saved from the throes of a chronic invalid reaction, a great deal has been done. Nevertheless the physician must remember he is still challenged with an ultimate goal, which is the patient's emancipation from invalidism.

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April 13th—Living with People. Elements of mental hygiene; getting along with people; adjustment to the environment.

April 20th. Who Chooses Your Physician? The characteristics of a reputable physician as distinguished from cults, quacks, fakers, faddists, or exploiters.

April 27th. Healthier Babies. Daily routine of the healthy baby; medical supervision; feeding.

COMING MEDICAL MEETINGS.

Arkansas Medical Society, Texarkana, April 18-20, 1938.

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OCULAR ALLERGY*

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I propose to offer nothing new in ocular allergy but to call attention to certain conditions and phases of the subject which are most important and practical to the ophthalmologist. The manifestations of allergy in the eye are varied and difficult of diagnosis, yet the eye, from the very beginning in the research on anaphylaxis and allergy, has served as a laboratory for the study of these reactions. The Calmette reaction, based on the sensitization of the conjunctiva to tuberculous serum, served as a beautiful and simple demonstration but, as all of you know, was not practical. Ocular manifestations of allergy are often overlooked by most of us, in most instances because of the lack of a thorough and detailed clinical history. Often the history alone will give us the diagnosis. Other major factors that must be studied are heredity, contacts, environments, habits, medications, plants, foods, etc. The reactions of the external eye lid resemble skin reactions caused by certain irritants elsewhere in the body. The lids are extremely sensitive and react more violently than ordinary skin, approaching mucous membrane in this respect. Any irritant may cause a terrific reaction, even to the fissure stage in certain instances. All of you have had cases easily traceable to hair washes, tonics, face creams, powder and mascara. I have recently had a case of acute conjunctivitis in a young lady, typically cosmetic in origin. She would report to my office approximately once every week or ten days with an acute conjunctivitis. After the usual treatment she would report the next day much improved. This continued for several weeks and she thought I was a good doctor, but soon became discouraged because there was not permanent relief. All this time I was questioning her about her cosmetics, hand lotions, etc., and I had checked her refraction. About one month ago she called by phone and very happily said she had determined the cause of her trouble. She had used a radio-advertised hand lotion that morning on her hands and massaged her eye lids as she had been in the habit of doing about once every week or ten days. Her eyes were then in the same condition as they had been each time I had seen her. I told her to refrain from using it any more and only a few days ago she reported to me for the last time, having had no further trouble and bade me farewell in this manner, "With lotions of love, Doctor, I'll not be back in a flash."

Both types of blepharitis marginalis, sicca and ulcerosa are usually caused by some sensitivity. The sicca type occurs usually in conjunction with dandruff or other scalp conditions while the ulcerosa type is most often due to a food sensitivity. Patients with recurring chalazia over a long period of time usually respond to treatment when a certain food to which they are sensitive is eliminated from the diet. To prove that allergy is the cause for this would be a hard task but it has happened to me in two cases. One time oranges were the offender; another, chocolate. The most common site of allergic manifestations in the eye is the conjunctiva, usually the palpebral portion. This reaction may give rise to acute or chronic types and these subdivided into different types by several different authors, but in the end no agreement on any one classification has been settled. The acute type is often diagnosed as acute catarrhal conjunctivitis or acute contagious conjunctivitis (pink eye). In the acute stage, nasal symptoms are usually outstanding, while in the chronic type the nasal symptoms may be absent or very mild. The chronic type is often diagnosed as phlyctenular conjunctivitis and is commonly mistaken and treated for trachoma. In the acute type there is uniform injection of the entire conjunctival sac; whereas in the chronic form it is not uncommonly localized in the conjunctiva of the upper lid, giving us the characteristic finding in many cases of the cobblestone appearance.

We are assuming that the chronic type above mentioned and commonly known as vernal catarrah is allergic. There is diversity of opinion on this question. Clark[1] states that patients with vernal catarrh do not show as a rule, a familial tendency such as is commonly observed in other allergic diseases, nor have they other associated manifestations of allergy. This has not been my observation and the majority of research workers have the same opinion. Lehrfeld[2] showed that 10% of his cases suffering from vernal conjunctivitis gave a history of other allergic manifestations and that 21% gave a definite family history of allergy. Townsend emphasized the frequency with which vernal conjunctivitis and hayfever are associated. In six cases I have recently seen at the University, clinic five gave definite history of allergy in the family while the other one was suffering with hayfever and the nose was filled with polypi. Lehrfeld[3-4]

*Read before the Section on Ophthalmology and Otolaryngology, Sixty-second Annual Session, Arkansas Medical Society, Little Rock, April 13, 1937.

in 1925 reported five cases and in 1932 eighty-seven cases of allergic conjunctivitis in which 50% of them showed an abundance of eosinophils in the conjunctival smears. The etiologic possibility is borne out by the clinical picture of the condition, the normal character of the bacterial flora, the resistance to treatment ordinarily used in conjunctivitis, such as astringents, collyria etc. As Wood's states, "In this type of conjunctivitis, the conjunctival reaction is often the only clinical evidence of tissue allergy." In 1933 LaGrange and Delthil[5] published a monograph on conjunctivitis and vernal catarrah and the last three years have published other papers definitely supporting the theory that vernal conjunctivitis is an allergic disease of the pseudo-follicular type of conjunctival allergy. Their conclusion is based principally on clinical observation and study. They also believe that heredity and endocrine disturbances influence the allergic diathesis of the affected persons, inducing a secondary stimulation of the vago-sympathetic system and that this predisposes to sensitivity of the tissues and the resultant allergic reaction. From our point of view as clinical ophthalmologists, what bearing should the diversified opinion given above have on the treatment of allergic disease? I should say not very much, as to the treatment we have been, or should have been using. The essential thing is to find the specific allergen or allergens to which the patient is hypersentitive and endeavor to isolate the patient from these and since vernal catarrah is a recurrent chronic disease, try to achieve and maintain desensitization. Such procedure with other routine therapeutics, will give usually satisfactorily results. Personally I believe that endocrine therapy has not progressed as yet to a degree to be listed as an indicated procedure in these cases. Literature today is filled with experimental work indicating that certain types of recurrent uveitis and iritis may be an allergic reaction caused by sensitization of the uveal tissue to bacterial allergens, these of course originating from a focus of infection. Woods[6] in 1933 summed up evidence in favor of this, due principally to the sterile cultures he obtained from the iris and aqueous in cases of iritis. Kolmer[7] believes that all types of endogenous iritis are due either directly or indirectly to the presence of microganisms in the iris. By indirectly, he refers to the activities of bacterial toxins in the iris, or to acquired allergic sensitization of the ocular tissue to bacterial products produced in foci of infection situated elsewhere in the body. The literature pro and con on this subject has been voluminous, but should we as clinical ophthalmologists, in these cases so cited, after removing the focus of infection, subject the patient to a skin test of each organism isolated from the focus of infection, and to assemble into an autogenous vacine for therapeutic use all the organisms to which the patient gave a reaction? My answer is emphatically no. The potential possibility for bacterial allergy, in my opinion, offers much more in the field of rhinology than ophthalmology. Attention was directed in 1911, by Wessley, to the fact that certain forms of keratitis are allergic manifestations. We now assume that some scleral and episcleral changes may be allergic, but it has only recently been called to our attention that the crystaline lens is not immune from the influence of allergens. Daniel[8] in 1933 reported three cases of cataracts in young adults, associated with skin manifestations thought to be allergic. Davis in 1932 cited a similar case. There have been other cases reported by foreign men but to my knowledge only four cases have been reported by American writers. I have a case similar to the four cases reported in this country, which I hope to report soon with Dr. Cazort, who so beautifully worked her out from the allergic view point. I am sure most of us have been grieved at times by severe reactions our patients have obtained from the use of drugs we have prescribed. Eserine and pilocarpine often cause a thickened and reddened conjunctiva with more or less photophobia and secretion, if used for a period of time. I have found butyn to be a frequent cause of sensitivity and I have a very good friend ophthalmologist who has to wear gloves when using it in the treatment of his cases. Optochin, dionin, cocaine, yellow oxide and even atropine are also numbered with the frequent offenders. Berneaud[10] has reported a case of blepharo-conjunctivitis and dermatitis from touching primrose and then touching the eye. Wiener[11] reports a case of flat retinal detachment in a patient suffering with chronic skin affection, the patient associating the loss of vision with the advent of the skin disease. She was studied carefully from an allergic angle and found to be sensitive to trichophyton. In the last issue of the Archives of Ophthalmogy, Plumer[12] reports a case of retinal allergy in which peanuts were the cause of the visual disturbance, clearing up with elimination of this food from his diet.

In conclusion, I am sure all of you recall several instances in which allergic manifestations were present in the eye, possibly caused by sensitization to things other than these I have men-

tioned. I feel sure there are many conditions which cause or aggravate local sensitization in the eye which we have not realized. While I am not over-zealous on the subject, I believe we have failed in certain ocular diseases by not giving due consideration to allergy as the etiological factor.

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After 35 years as a member of the medical profession and nearly a quarter of a century as an official of the State Association, I am convinced that the greatest stumbling block to the progress of organized medicine is nothing short of plain unadulterated indifference.—M. M. McCord, M. D., Journal of the Medical Association of Georgia.

While the economic future is shrouded in uncertainty, we cannot concentrate upon it to the exclusion of our main objective—that of developing the art and science of medicine.—J. Morrison Hutcheson, M. D., President, Medical Society of Virginia.

The purpose of your medical society is to lighten your burden by the united action of the entire membership.—Wichita Medical Bulletin.

DIARRHEA IN THE ARTIFICIALLY FED BABY*

ROBERT HOOD, M. D.
Russellville

The approach of the summer months brings to our mind one of the most important considerations with which we are faced during the entire year, that of infant diarrhea. When we read the statistics we realize that this condition causes as many deaths as all others combined. It is a recognized fact that the mortality rate from this condition is on the decline, but as this cause of death is one largely preventable, it is yet too high. The cases among artifically fed babies are said to be about five times greater than those fed at the breast. The reasons for this are many: diets unsuited for the individual case, contamination of milk, etc. These will be discussed under the proper subheads.

Attempts at classification have been many, principally made upon post-mortem changes and bacteriology of the secretions. Certain clinical divisions have also been attempted but with out present knowledge these are impractical. It is important to remember that diarrhea is not a disease, but a symptom of many functional and pathological changes.

In diarrhea there is an increase in the motility and irritability of the intestine resulting in increased peristaltic movements, rushing the food through the intestine unchanged. This may be due to the formation of irritants by the fats and sugars or to the action of bacterial toxins.

We may have a diarrhea due to premature development. A child born short of a full-term pregnancy is not ready for extra-uterine life. It has lived as a parasite in the uterus. The processes of circulation and nutrition have been carried on without stress or strain upon its own organism and if this baby is brought into the world too early it is not ready to independently carry on the necessary functions of life. The intestine may not have enough acid to inhibit bacterial growth and fall prey to an invasion by the colon group. This is especially true of the artifically fed, as the cow's milk has a higher buffer value. The tough curds of the cows milk also serve to prevent the action of what small amount of acid is available.

Nervous irritability is also a well recognized cause of diarrhea. Since decomposing food and organisms also render the intestine irritable it is impossible to draw a sharp line between the

*Read before the Sixty-second Annual Session of the Arkansas Medical Society, Little Rock, April 14, 1937.

cases due to this cause and those due to nervous irritability. By damaging the intestinal wall the decomposing foods make it more irritable. That nervous influences may play an important part is well illustrated in the practice of all who treat children. We all know that nervousness may cause a desire to defecate.

Perhaps the most important etiological factor in the cause of diarrhea is food. Under-feeding over-feeding, diets not suited to the individual, and food contamination must all be considered. According to Marriott under-feeding is a frequent cause of diarrhea. It is more likely to occur in patients who have been underfed for some length of time. Deficient amounts of vitamins, salts, proteins or carbohydrates may result in diarrhea. A lowering of the blood sugar results in hyper peristalsis. Colic and cramps are usually present in this type. Little food material is found in the stools. Over-feeding in amount, as well as in number of feedings is also a recognizable cause. It has been my experience that no amount of warning or pleading will prevent some mothers from nursing or giving a baby a bottle whenever it wants one. Many do this to stop the baby from crying. Perhaps the discomfort is due to the previous feeding. The usual explanation from the mother is that the baby is hungry. There results an overloaded intestine unable to take care of the digestive processes with insufficient acid to prevent bacterial growth and to neutralize the buffer substances.

The preparation of a diet for artifical feeding should be given the most careful thought. The question is always raised, what is the offending food when a diarrhea from this cause is found? To answer this important question I refer to the remark of the late Dr. Morgan Smith, beloved Dean and Professor of Pediatrics at the University of Arkansas Medical School! "BE A DIAPER READER."

Carbohydrate fermentation will usually give a stool which is watery and loose, the color green with little odor. Protein or alubumin milk, albumin water and casec may be used in these cases. The food to be started after a six hour fast. Protein putrefaction stools are brown and very foul smelling. Rice water or gruel, barley water and whole wheat flour gruel are of benefit in these cases. The stools of the infectious types will be discussed under that division.

Contaminated foods as a cause of diarrhea are greatly on the decline at present. This is due to the improved dairy methods, rigid inspection of the herds, care of the utensils used in preparing the formulae and the use of commercial canned milks. The use of certified and pasteurized milk also played an important part.

Infectious Type.

The incidence of this type of diarrhea is likewise on the decline. This is also due to improved hygienic conditions. The greater number of these cases are found in the hot summer months, probably due to the fat that the heat lowers the resisting power of the individual and favors the growth of bacteria. The bacillus dysentery seems to be the offending agent in most cases. However other organisms as the gas bacillus, streptococcus, colon and B. Pyocaneus may be responsible.

The work at the Boston Floating Hospital conclusively proved this. In this type the onset is sudden. However, it may be preceded by several days of indigestion. The stools soon show blood and mucous and, after a few days, are entirely so constituted. The temperature is from 100° to 102° but may go higher in the severe cases. The appetite is much impaired but vomiting is not troublesome in the less severe cases. The blood count is high reaching 20,000 or more. If the system is weak and unable to react a leucopenia may result. Abdominal pain and tympany are marked symptoms and found early. Toxic absorption and dehydration are severe when present, and uncontrollable vomiting and irritation of the nervous system may result. These cases may terminate fatally.

In association with the infectious diarrheas we must not loose sight of the possibility of parenteral infections. These should be looked for carefully and if found eradicated. The most common locations are above the shoulder: the throat, ear, nose, and mastoid cells. Many diarrheas have been cured by the removal of a focus of infection. Unfound foci may account for the uncontrollable cases.

The treatment of diarrhea should be according to very definite principles. These are listed by Marriott as follows: Recognition and suitable treatment of parenteral infections; Rest of the gastro-intestinal tract; The giving of food adapted to the limited digestive capacity; restoration and maintenance of fluid balance; and blood transfusion in the severe cases. Sera have also been used in the bacillary and B. Coli types. The removal of foci of infection is essential. Very often it is an ear. A bulging membrane should be incised and free drainage instituted. Drainage of the mastoid area may be necessary if the condition of the child will allow. In cases where dehydration occurs the giving of fluid

is essential. It may be given by mouth, intravenously, subcutaneously, or intra-peritoneally. In severe cases, blood transfusion should be done. The solution of Hartmann is extensively employed.

The period for withholding food depends on the condition of the child. An ill-nourished child ill for a long period needs food at an earlier date than the well, robust one. The first food should be a lactic acid milk, the amount depending on the individual. I have found the use of lemon juice very serviceable in my practice, using a teaspoonful of lemon juice to the bottle of milk. When the condition subsides sufficiently the balanced diet should be resumed. Drugs: The initial purge is a much debated question. I think this depends entirely on the condition of the patient. If the child is weak and dehydrated to begin with I can see only disastrous results. However, if the baby is in fair condition and the movements not too frequent an initial purge may be allowed. Castor oil is perhaps the best drug for this purpose but should not be repeated. Bismuth subcarbonate may be used but the dose must be large. The beneficial action is said to be due to the coating of the irritated intestinal wall. Atropine may be used if vomiting and gastro-intestinal spasm are present. The use of opium is often debated but should, no doubt, be considered. If used, the Tr. Opium Camphorata should be the drug of choice, given in small doses. I think it is especially indicated in prolonged cases with much fluid loss. Perhaps the most widely accepted recent method of treatment is the raw apple pulp diet of Heisler and Moro. In 1928 they published their experiences with this method. In all of the articles published similar results have been obtained. Drop in temperature, change in nature and consistency of stools, and relief from discomfort are noted. The question which has caused the most speculation in reference to the treatment is the therapeutic factor. Heisler thought it was pectin, but pectin in other foods did not give results. Mallic acid was then given credit, but it was shown that neutralizing the acid did not impair the action of the apple pulp. J. E. Bittner, Jr., offers the following explanation: "It is my thought that the action of the apple pulp is not one of germicidal nature, but that it is entirely one of absorption of the toxic effects of the bacterial invasion. I believe that the only effect the apple pulp has on the intestinal flora is that of removing exotoxic products of bacterial growth, thereby relieving the system from the absorption of these products and allowing the blood stream defenses to concentrate directly on the bacterial invasion." I am happy to report that I have used the apple pulp treatment many times in the past few years and have received very gratifying results."

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RESOLUTIONS

HARVEY S. THATCHER

WHEREAS God in his infinite wisdom has seen fit to remove from our presence, our friend, associate and teacher, Dr. Harvey S. Thatcher, and

WHEREAS Dr. Thatcher was a brilliant research worker and an integral part of organized medicine, and

WHEREAS Dr. Thatcher's researches on the pathology of vitamin deficiencies have been of great benefit to mankind and of such quality that his name is known throughout the world, and

WHEREAS Dr. Thatcher has achieved everlasting fame in this world through his scientific investigations, and

WHEREAS Dr. Thatcher was a kind husband and a loving father, doing all that could be done for the happiness of his family, therefore let it be

RESOLVED by the Pulaski County Medical Society of Arkansas that deeply we do regret his untimely departure, and do extend to his widow and daughters our deepest sympathy and condolences, and be it further

RESOLVED that a copy of this resolution be incorporated into the minutes of this society; that a copy be sent to the Arkansas Medical Journal for publication; that, since Dr. Thatcher was a Councilor for Arkansas of the Southern Medical Association, a copy be sent to the editor of the Southern Medical Journal for publication; and, that a copy be sent to the immediate family of the late Dr. Thatcher.

By the Committee:
Barton A. Rhinehart, Chairman.
L. Val Parmley,
A. F. DeGroat.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XI April, 1938 No. 4

SEVEN REASONS

for directing attention again to the early tuberculous lesion and its cure:

The nature of the early lesion is better understood now than ever before.

The time of life when the lesion is most likely to appear is more clearly defined.

The methods of diagnosing its presence have been developed and perfected.

The subsequent behavior of the early lesion and the ways of its healing or advancement are better known.

Most disabling and fatal tuberculosis originates in this lesion.

Knowledge of the methods of treatment and their proper selection and application is more accurate and reliable.

The far-reaching and vastly superior results of proper and timely treatment of the early lesion are firmly established.

Nature of the Early Lesion

The small tuberculous lesion first discovered in the lung is not necessarily an early one. The lesion that is not only small but also recently developed, may be caused by infection from without or by an extension from preexisting lesions, usually tiny or even microscopic, which, for a short or long time, have lain dormant and concealed. Previous examinations, therefore, may have revealed nothing abnormal except perhaps an apparently insignificant apical scar or a calcified hilar lymph node. The development of the early lesion, often called the early infiltration, may be rather abrupt, that is, within a week or a month, or it may be gradual with static periods of apparent quiescence. Rapidity of development, however, is one of its common characteristics. Pathologically it is a patch of tuberculous bronchopneumonia, occupying a section of the parenchyma usually not more than 2 or 3 cm. in diameter, sometimes at the apex but more often just below. The patient has no symptoms or only slight to moderate constitutional ones, chiefly a loss of a few pounds of weight and a little undue fatigue. Fever is not usually detected, and cough, expectoration and bloody sputum are rare at this stage. In some cases a patch of fine rales may be heard directly over the small lesion, but more often the physical examination reveals nothing abnormal in the chest. The roentgenogram shows, as a rule, the small area of soft infiltration in one lung. Tubercle bacilli are not found in the sputum unless the lesion has caseated and broken into a bronchus, and this is not the condition at the very onset.

Case-finding surveys among apparently healthy persons have shown that while no age is immune to tuberculosis, the peak of development is between adolescence and the late twenties. Fellows, in a study of annual examinations of a clerical force of about 10,000 women and 2,000 men, found that in a 5-year period clinical pulmonary tuberculosis developed in 142 previously healthy persons, of whom 83% were between the ages of 18 and 27.

Diagnosis

The early lesion will be discovered in only a small minority of cases unless organized searches for it are made periodically. The patient, having few or no symptoms of illness, does not seek the physician. Rather, the physician, in his capacity as a farseeing health officer, must seek the patient. Tuberculin testing and X-ray examination of the chest, wisely planned and applied, are indispensable parts of the diagnostic method. If the diagnosis is adequate, it will include not only a recording of the lesion but also an interpretation of its potential significance and the

need for treatment. The small size of the infiltration, the lack of symptoms, and the failure to find tubercule bacilli in the sputum often cloak the situation with a grossly undeserved aspect of innocence.

Subsequent Behavior of the Lesion

The early infiltration may be absorbed almost completely, leaving behind a small scar, or it may spread, become caseated and liquified at its center and ulcerate into a bronchus, whence other parts of the lung may become contaminated, the beginning of advanced tuberculosis. Absorption, if it occurs, is slow. The tendency to central caseation is a predominant one, varying in intensity and rapidity. After ulceration and excavation of the lesion occurs, the rate and extent of formation of secondary lesions vary within wide limits. Acute bilateral tuberculous bronchopneumonia may be set up within a few weeks. More often the extensions occur at irregular intervals, and gradually the case drifts into the confirmed chronic state. The eventual contamination and infection of the larynx, intestine and other related structures by the bacilliferous discharges from the pulmonary cavities is frequent.

The frequency of spontaneous healing of untreated early lesions is a matter for further investigation. The most optimistic observers estimate that as high as 40 per cent of the lesion may heal completely. I am reasonably certain, after ten years of special attention to the point, that the majority of early infiltrations developing in young people progress and undergo excavation if they are not promptly and properly treated.

Most Serious Tuberculosis Related to Early Lesion

Sufficient information has been accumulated by the pathologists and from a study of pathogenesis in the living to warrant the conclusion that most disabling and fatal tuberculosis originates from the once innocent-appearing early infiltration. An appreciation of this linkage has been lacking until recent years yet is one of the most important and basic principles in treatment and control. The conception, to be complete, includes the element of time relationships, because, as stated, the extension from the early lesion may be rapid or slow, limited or wide, continuous or discontinuous. Connecting this conception with the evidence that most early pulmonary infiltrations put in their appearance between adolescence and the late twenties, it follows that advanced tuberculosis is unlikely to develop in a person past 30 unless he has acquired a considerable lesion before this age.

Method of Treatment

The tendency is for the early lesion to caseate rapidly. Treatment should aim to prevent, retard or arrest the process. The sooner and the more strictly the rest cure in a sanatorium can be instituted, the more effective it is likely to be. In many cases the treatment of the first few weeks is the most important of all. The younger the person, the more liable the lesion is likely to be and the greater the need for prolonged rest. Consideration of the potential hazard of the lesion, as already discussed, and of the desirability of permanent recovery with the least sacrifice of function often takes precedence and dictates continuation of rest in bed well beyond the time when symptoms have subsided and the hematologic picture is normal. From six to twelve months of sanatorium care is advantageous. Most patients can then gradually resume activities, but a definite limitation of these for another year is usually necessary. Pneumothorax or temporary paralysis of the diaphragm may give the necessary lift to the patient who, on rest treatment alone, does not show definite and steady favorable progress.

Results of Treatment

I can speak of an experience with more than 100 cases in which the lesions were actually early, since previous roentgenograms showed no disease; they occurred in young people, and observation was possible from one to ten years afterward. This is supplemented by consideration of many hundreds of other cases of rather recent origin in which the duration and course of the disease was reasonably clear though not always verifiable. The experience is not adequate for statistical presentation and I give only a considered judgment, based more on an intensive study of individual cases than on groups. Thus far, most of the untreated cases have progressed into advanced disease. Patients treated promptly and with bed rest at the start have recovered without progression of the lesion in about 90 per cent of the instances. In most of the others, advancement or relapse, if any, has been promptly detected and usually controlled by artificial pneumothorax. Considering permanence of recovery, preservation of pulmonary function and working ability after treatment, the experience has been much superior to any other plan attempted.

The Lasting Cure of Early Pulmonary Tuberculosis, J. Burns Amberson, Jr., M. D., Jour. of the A. M. A., Dec. 11, 1937.

THE JOURNAL
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

EDITORIAL

ATTEND THE TEXARKANA SESSION

The Journal prints in this issue the preliminary program and announcements of the Sixty-third Annual Session of the Arkansas Medical Society. We have never seen a more complete program outline. The usual high-class diversified scientific program is most complete with a number of guest speakers of national reputation supplementing the presentations of our own members. The Society is honored in a visit from Dr. J. H. J. Upham, President, of the American Medical Association. With Dr. Shelton Horsley as co-speaker, we feel that we shall offer the citizens of Texarkana a pleasant and profitable public session. Entertainment has not been overlooked by the hospitable Miller county physicians, assisted as hosts by the members of the Bowie County, Texas, Medical Society. The third annual conference of county medical society secretaries is combined for the first time with the state meeting. There will be something doing every minute in Texarkana. Those who attended the 1931 session in this city of two states will not hesitate in making their plans now. Situated at the southwestern corner of the state, Texarkana physicians plan to overcome the handicap of their geogrophical position by making this the best meeting ever. We well know that they are in a position to do this, having sampled their hospitality on previous occasions. The annual session offers the members an opportunity to get together, meet old friends, make new ones, replenish their professional stock in trade and generally enjoy themselves. Everyone loses if YOU do not attend. We shall expect to see you in Texarkana April 18th, 19th and 20th.

EDITORIAL COMMENT

MRS. ROOSEVELT SPEAKS ON SOCIALIZED MEDICINE

The Washington Merry-Go-Round quotes Mrs. Roosevelt, not generally reticent in expressing opinions, as replying to the direct question if she thought that the state and federal government should assume greater responsibility for the care of the sick: "I think the federal government should assume increasing responsibility for research and laboratory work, but it seems to me that ways can be devised which will enable our population living in poor areas to pay for their own needs from a medical standpoint. We may need to pay a little more in taxes for state and federal hospitals in order to bring about better

training of our doctors and nurses. No American is anxious to look upon medical care as a charity and I feel that every effort will be made to bring within the reach of every group of people the necessary medical attention through the cooperation of doctors and the public."

It would seem to us that Mrs. Roosevelt has her ear just a bit closer to the ground and has not been listening so much to a group of reformers, paid agents and philantrophists and "yes" men as has Mr. Roosevelt. We would like to remind her that the fundamental solution of this problem is not medical, but economic; if the average American receives an adequate wage, he and his physician can work out the provision of medical care in a manner quite satisfactory to each party.

HEALTH TALKS OF THE ARKANSAS SOCIETY

Under the supervision of the Committee on Public Relations there have been prepared and distributed weekly releases to the newspapers of Arkansas, entitled "Health Talks." This activity was inaugurated the first week in January, 1938, and a health talk has been mailed each week to date. The reception accorded these short messages on health has been most cordial, over 50 newspaper editors using these more or less regularly in their columns. This represents about one-third coverage of the state. The Committee is most interested in seeing that these are published in every newspaper in the state and appeals to the members to personally call upon their local editors in requests for this cooperation. We feel that these health talks are of general informative interest to the laity of the state and that their value will increase in direct proportion to the number of editors who regularly avail themselves of our offer.

DIPHTHERIA IMMUNIZATION

With the introduction of the one-injection toxoid immunization process there seems to be little excuse for the continued presence of diphtheria. Indeed, were this preventive means better utilized one could well predict the virtual eradication of this childhood malady. Slowly does medical progress reach its ultimate beneficiaries and this is true with diphtheria immunization. At its 1937 session this Society adopted a resolution calling for legislative action, supported by all measures which would inform the public, requiring immunization against diphtheria in all school children. It was not to be expected that this desired aim would be reached within the immediate present; a long continued effort will be essential if the aim is eventually attained. Some county medical societies and communities are now launched in such a campaign; it remains for all county societies to exert their influence.

PEDIATRIC REFRESHER COURSES

Announcement is made that refresher courses in Pediatrics conducted by Dr. Jean Valjean Cooke, Associate Professor of Pediatrics, Washington University School of Medicine, will be held in the following cities during May and June, 1938: Texarkana, Camden, Pine Bluff, Forrest City, Conway and Fort Smith. These lectures are made available through the cooperation of the Arkansas State Board of Health and the Arkansas Medical Society. Full details will be published in the May issue of The Journal.

THE FRANKLIN COUNTY CORRESPONDENT

March 13, 1938

Dear Sir:

I thank you for sending me Dr. Davison's note. I am glad he felt complimented by the review of his book. I am quite sure that he knows how to write good English. He writes clearly, simply and forcibly; a style very desirable in medical writing.

The Franklin County Medical Society met March 8, at Dr. Post's home in Altus with five present. Dr. Post was so good a host and his house such a delightful place to meet that all present were highly in favor of having all our meetings there—that is except Dr. Post. Excellent refreshments were served: ice cream, cake, coca-cola, cigars and cigarettes.

Dr. Porter was a little late arriving because he said he had to take his wife to a church dinner given in honor of Rev. A. C. Smith. He came in patting his middle front so we couldn't tell whether his interest in a church affair was religious or just gastronomic.

On the program Dr. Post reported an interesting complication in a case of measles. A young man with a large number of abscesses of the scrotum and penis, the latter swelling to a size larger than any ever reported by Dr. Earle Hunt.

Dr. Gibbons reported an interesting case of influenza.

Yours very truly,

THOS. DOUGLASS,

Sec. Franklin Co. Med. Soc.

Preliminary Program and Announcements

OF THE

SIXTY-THIRD ANNUAL SESSION OF THE

ARKANSAS MEDICAL SOCIETY

TEXARKANA

APRIL 18, 19, 20, 1938

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NINTH DISTRICT—Baxter, Boone, Carroll, Marion, Newton and Searcy counties. Councilor, D. L. Owens, Harrison. Term of office expires 1939.

TENTH DISTRICT—Benton, Crawford, Franklin, Johnson, Logan, Madison, Sebastian, Scott and Washington counties. Councilor, Clyde McNeil, Rogers. Term of office expires 1938.

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—R. B. Robins, Camden, Chairman (1939); Ralph M. Sloan, Jonesboro (1940); W. R. Brooksher, Fort Smith (1938).

MEDICAL LEGISLATION—Joe F. Shuffield, Little Rock, Chairman (1940); L. J. Kosminsky, Texarkana (1940); S. J. Allbright, Searcy (1940); Euclid M. Smith, Hot Springs National Park (1939); Stanley M. Gates, Monticello (1939); A. S. Buchanan, Prescott (1938); R. M. Eubanks, Little Rock (1938).

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MEDICAL EDUCATION AND HOSPITALS — W. G. Hodges, Malvern, Chairman (1938); Joseph Roe,* Little Rock (1940); R. T. Smith, Little Rock (1938).

PUBLIC RELATIONS—W. T. Wootton, Hot Springs National Park, Chairman (1939); S. C. Fulmer, Little Rock (1940); Pat Murphey, Little Rock (1938).

MEDICAL ECONOMICS—A. C. Shipp, Little Rock, Chairman (1938) J. G. Gladden, Harrison (1940); T. O. Guthrie, Smithville (1940); W. Decker Smith, Texarkana (1939); A. F. Hoge, Fort Smith (1939); M. C. John, Stuttgart (1938); R. M. Blakely, Little Rock (1938).

SCIENTIFIC EXHIBIT—E. H. White, Little Rock, Chairman (1940); H. Fay H. Jones, Little Rock (1938); Geo. V. Lewis, Little Rock (1939); A. H. Hathcock, Fayetteville (1940).

AUXILIARY—Don Smith, Hope, Chairman (1939); L. F. Barrier, Little Rock (1938); Hoyt Allen, Little Rock (1940).

NECROLOGY—E. E. Barlow, Dermott, Chairman (1940); Thos. Douglass, Ozark (1939); W. H. Mock, Parie Grove (1938).

CANCER CONTROL—Fred H. Krock, Fort Smith, Chairman (1940); J. S. Stell, Hot Springs National Park (1939); M. J. Kilbury, Little Rock (1938).

SPECIAL COMMITTEES

MATERNAL WELFARE—S. A. Thompson, Camden, Chairman; E. H. White, Little Rock; J. T. Matthews, Heber Springs; J. O. Rush, Forrest City; P. H. Phillips, Ashdown; J. H. Fowler, Harrison; H. C. Dorsey, Fort Smith; C. A. Archer, DeQueen; B. James Reaves, Little Rock.

POSTGRADUATE STUDY—D. A. Rhinehart, Little Rock, Chairman; Joe F. Shuffield, Little Rock; Fred H. Krock, Fort Smith; H. S. Thatcher,* Little Rock; B. L. Moore, El Dorado; E. E. Barlow, Dermott; R. B. Robins, Camden; A. S. Buchanan, Prescott; Roy Millard, Russellville; A. C. Watson, Haskell; S. C. Fulmer, Little Rock; C. S. Moss, Hot Springs National Park; H. E. Mobley, Morrilton; M. E. McCaskill, Little Rock; E. J. Munn, El Dorado.

CONTROL OF SYPHILIS—D. W. Goldstein, Fort Smith, Chairman; Louie G. Martin, Hot Springs National Park; Geo. F. Jackson,* Little Rock.

REVISION OF CONSTITUTION—R. B. Robins, Chairman, Camden; M. C. Hawkins, Jr., Searcy; D. L. Owens, Harrison.

ON COOPERATION WITH WELFARE AGENCIES—Val Parmley, Chairman, Little Rock; D. A. Rhinehart, Little Rock; M. E. McCaskill, Little Rock; O. J. T. Johnston, Batesville; C. W. Dixon, Gould; W. R. Brooksher, Fort Smith.

LOCAL COMMITTEES

GENERAL CHAIRMAN—
R. R. Kirkpatrick

RECEPTION AND REGISTRATION—
J. T. Robison, Chairman
W. A. Hutchinson — H. E. Longino
J. N. White — E. L. Beck

PUBLICITY—
L. J. Kosminsky, Chairman — R. R. Robins

FINANCE—
T. F. Kittrell, Chairman — T. E. Fuller

MEETING PLACE—
Preston Hunt, Chairman
J. F. Williams — B. C. Middleton

SCIENTIFIC EXHIBIT—
L. P. Good, Chairman — Albert Mann
Perry Priest — C. Harrell

INFORMATION—
C. A. Smith, Chairman — Joe Tyson
A. W. Roberts — R. C. Cross

TRANSPORTATION—
C. E. Kitchens, Chairman
L. H. Lanier — A. G. Lee
R. W. Pickett — C. S. Laws

GOLF—
Roy F. Baskett, Chairman
Harry Murry — S. A. Collom, Jr.

COMMERCIAL EXHIBITS—
W. Decker Smith, Chairman
E. M. Watts — G. W. Parsons

ENTERTAINMENT—
L. J. Kosminsky, Chairman
R. R. Kirkpatrick — N. B. Daniel

*—Deceased.

LADIES' ENTERTAINMENT—
Wm. Hibbitts, Chairman — Frances Spinka

PUBLIC MEETING—
H. E. Murry, Chairman
Max McAllister — Jack Frost

ANNOUNCEMENTS

The registration desk will be located in the Ball Room of the Grim Hotel and will be open from 8:00 a. m. to 5:00 p. m. April 18, 19 and 20th. The desk will also be open Sunday afternoon, April 17th, from 4:00 to 6:30 p. m. Delegates are requested to register as early as possible, presenting credentials at the time of registration. Members and visitors are also requested to register and receive the official badge and program. Admission to all sessions will be by badge. Bring your 1938 membership card to facilitate registration. Members of the American Medical Association from any state may register as guests.

PAST-PRESIDENTS' BREAKFAST

The Past-presidents will convene in annual breakfast session, Wednesday, April 20th, at 7:30 A. M., in a private dining room of the Grim Hotel.

CONFERENCE OF COUNTY SOCIETY SECRETARIES

Secretaries of the component county medical societies will meet for their third annual conference in dinner session, Grim Hotel, Monday, April 18th, 6:00 P. M. The guest speaker will be Dr. S. D. Neely, Secretary, Muskogee County (Oklahoma) Medical Society. County society secretaries are requested to ask for tickets to this session when registering.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society, including the Past-presidents, will meet at noon each day in a private dining room of the Grim Hotel immediately following the adjournment of the morning sessions.

GOLF

Tournament play for the Dewell Gann, Jr., cup will be held Tuesday, April 19th, at the Texarkana Country Club. Three additional prizes will be offered for high score. Prizes will be awarded at the banquet session, Tuesday night.

SKEET AND TRAP SHOOTING

Skeet and straight traps will be open for all who wish to shoot. Further announcement will be made during the session.

The Arkansas State Pediatric Society will meet at 10:00 A. M., Monday, April 18th, in the Grim Hotel. The Scientific Program will be followed by a round-table luncheon.

ENTERTAINMENT

April 18th, 5:30-7:30 P. M.

Open House, Miller County Medical Society, 220 West 5th Street.

April 19th, 6:30 P. M.

Banquet, Reception, Dance, Grim Hotel.
Obtain tickets at registration desk.

PROGRAM

HOUSE OF DELEGATES

First meeting, Grim Hotel, April 18th, 9:00 A. M.

Meeting called to order by O. J. T. Johnston, President.

Report of Credentials Committee.

Appointment of Reference Committee.

Introduction of Fraternal Delegates.

Adoption of Minutes of the Sixty-second Annual Session as published in the June, 1937 issue of The Journal of the Arkansas Medical Society.

President's Address to the House of Delegates.

REPORT OF COMMITTEES

SCIENTIFIC WORK—R. B. Robins, Chairman.
MEDICAL LEGISLATION—Joe F. Shuffield, Chairman.
HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Chairman.
MEDICAL EDUCATION AND HOSPITALS—W. G. Hodges, Chairman.
PUBLIC RELATIONS—W. T. Wootton, Chairman.
MEDICAL ECONOMICS—A. C. Shipp, Chairman.
SCIENTIFIC EXHIBIT—E. H. White, Chairman.
AUXILIARY—Don Smith, Chairman.
NECROLOGY—E. E. Barlow, Chairman.
CANCER CONTROL—Fred Krock, Chairman.
MATERNAL WELFARE—S. A. Thompson, Chairman.
POSTGRADUATE STUDY—D. A. Rhinehart, Chairman.
SYPHILIS CONTROL—D. W. Goldstein, Chairman.
WELFARE AGENCIES—Val Parmley, Chairman.
COUNCIL—Val Parmley, Chairman.
REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY—L. J. Kosminsky, Secretary.
REPORT OF DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION—W. H. Mock.
REPORT OF FRATERNAL DELEGATES.
REPORT OF COUNSEL—Hon. Peter A. Deisch.
REPORT OF THE TREASURER—R. J. Calcote.
REPORT OF THE SECRETAY—W. R. Brooksher.
NEW BUSINESS.
Selection of the Nominating Committee.

SCIENTIFIC SESSION

MONDAY, APRIL 18TH, 1:30 P. M.

CALLING THE SOCIETY TO ORDER—O. J. T. Johnston, President.

INVOCATION—Rev. David E. Holt, Episcopal Church.

ADDRESS OF WELCOME—Mayor E. C. Seibert, Texarkana, Ark.

ADDRESS OF WELCOME ON BEHALF OF MILLER COUNTY MEDICAL SOCIETY—W. Decker Smith, President.

RESPONSE ON BEHALF OF THE ARKANSAS MEDICAL SOCIETY—Thos. Douglass, Ozark.

PRESIDENT'S ANNUAL ADDRESS.

"Clinical Implications of Some Recent Studies in Gastric Motility," J. H. J. Upham, President, American Medical Association, Columbus, Ohio.

"Phases of Renal Edema and their Treatment," M. Herbert Barker, Chicago.

"Exploitation of the Medical Profession," J. S. Jenkins, Pine Bluff.

"The Symptoms, Diagnosis and Treatment of Cancer of the Stomach," J. Shelton Horsley, Richmond, Virginia.

"The Doctor and the Dollar," Mr. Robert Woolsey, Fort Smith."

EVENING SESSION

8:00 P. M.
Texarkana Auditorium
Public Session

CALLING THE MEETING TO ORDER—W. Decker Smith, President, Miller County Medical Society, Texarkana.

INVOCATION — Rev. Harry DeVore, First Methodist Church.

INTRODUCTION OF DISTINGUISHED GUESTS—O. J. T. Johnston, President, Arkansas Medical Society.

ADDRESS—**"The Menace of Cancer,"** J. Shelton Horsley, Richmond, Virginia.

ADDRESS—**"Present-Day Problems in the Medical Profession,"** J. H. J. Upham, President, American Medical Association, Columbus, Ohio.

BENEDICTION—Rev. Tom Wilbanks, Pine Street Presbyterian Church, Texarkana.

MEMORIAL SERVICES

TUESDAY, APRIL 19TH, 8:00 A. M.
FIRST BAPTIST CHURCH

CALLING MEETING TO ORDER—O. J. T. Johnston, President, Arkansas Medical Society.

INVOCATION—Rev. J. T. Wilbanks.

VIOLIN SOLO—"Ave Maria" (Shubert),
Mrs. Philip King Alston, accompanied by
Mrs. Lloyd White at the organ.

ADDRESS—Mrs. H. King Wade, Hot Springs National Park.

ADDRESS—E. E. Barlow, Dermott.

VOCAL SOLO—"Eye Hath Not Seen" (The Holy City)
Mrs. Will Quinn, accompanied by
Mrs. Lloyd White at the organ.

BENEDICTION—Rev. F. E. Maddox.

IN MEMORIAM

Walter M. Chavis, Pine Bluff, March 16th.
Max O. Usrey, Blytheville, March 29th.
William Richard Hunt, Clarksville, March 30th.
Joseph L. Clemmer, Gentry, April 1st.
James Arthur Wigley, Mulberry, April 4th.
Arthur Myers Gibbs, Hamburg, April 17th.
Charles W. Horton, Hiwassee, April 28th.
Pleasant E. Terry, Holly Grove, April 29th.
James Daniel Mooney, Coal Hill, April 30th.
Jefferson D. Southard, Fort Smith, May 9th.
Robert Rodney Dale, Texarkana, May 10th.
John Marion Hooper, Batesville, May 19th.
James A. Foltz, Fort Smith, May 22nd.
Joseph B. Shaw, Hot Springs, May 28th.
William A. Clark, Bald Knob, July 8th.
John E. McMahan, Conway, July 31st..
Joseph McDowell Brewer, El Dorado, August 27th.
Cooley S. Ellis, Lonoke, September 4th.
George Hicks Martindale, Hope, September 9th.
Nehemiah Irving Stebbins, Nashville, September 21st.
Joseph L. Roe, Little Rock, October 24th.
Robert Lee Paxton, Sheridan, October 29th.
Robert Addison Milliken, Little Rock, November 1st.
Charles Edward Ritchie, Stephens, November 16th.
J. William Scales, Pine Bluff, December 4th.

Shelbey Boone Hinkle, Little Rock, December 5th.
Edward Turner Bramlitt, Malvern, December 18th.
George P. Sanders, Stephens, January 15th.
Harvey Shepherd Thatcher, Little Rock, January 20th.
George Homer Buffington, Decatur, January 24th.
George F. Jackson, Little Rock, January 25th.
Fleming James O'Connor, Little Rock, February 3rd.
William W. York, Ashdown, February 3rd.
William Woodword Easterling, Lake Village, February 21st.
Henry Pace, Eureka Springs, March 13th.
William Guy Pittman, Pine Bluff, March 16th.

SCIENTIFIC SESSION

TUESDAY, APRIL 19TH, 9:00 A. M.

"Hypotension and Its Significance," John Samuel, Little Rock.

"Hypertension: A Review of Recent Advances in Therapy," M. Herbert Barker, Chicago.

"Spontaneous Pneumopericardium-Case Report," Alan A. Gilbert, Fayetteville.

"Diagnostic Bronchoscopy" (illustrated), John Agar, Little Rock.

"Modern Chest Surgery," J. K. Donaldson, Little Rock.

"Collapse Therapy in Pulmonary Tuberculosis," Charles R. Gowen, Shreveport.

SCIENTIFIC SESSION

TUESDAY, APRIL 19TH, 1:30 P. M.

"The Differential Diagnosis of Tuberculosis," J. D. Riley, State Sanatorium.

"Present Status of Sulfanilamide Therapy for Severe Infections in Infants and Children," Alexis Hartmann, Saint Louis.

"The Role of the General Practitioner in the Treatment of Fractures," T. P. Foltz, Fort Smith.

"The Medico-Legal Aspects of the Surgery of Trauma," Val Parmley, Little Rock.

"Fractures of the Elbow," D. H. O'Donoghue, Oklahoma City.

"The Immunology and Laboratory Diagnosis of Syphilis," M. J. Kilbury, Little Rock.

"Treatment of Some Common Skin Diseases," C. B. Erickson, Shreveport.

"The Diagnosis and Treatment of Early Syphilis," Arthur G. Schoch, Dallas.

"A Study of Bacillary Dysentery," L. D. Massey, Osceola.

SECTION ON OPTHALMOLOGY AND OTOLARYNGOLOGY

TUESDAY, APRIL 19TH, 9:00 A. M.

CHAIRMAN—T. E. Fuller, Texarkana.

SECRETARY—Raymond C. Cook, Little Rock.

"Refraction," L. Gardner, Russellville.

"Intraocular Tumors," A. W. Roberts, Texarkana.

"Is Sinus Disease Curable?" Virgil Payne, Pine Bluff.

"Some Personal Experiences with the Trephine Operation in Glaucoma," E. C. Moulton, Fort Smith.

"Detached Retina," W. R. Buffington, New Orleans.

Program to be followed by noon luncheon and round-table discussion.

TUESDAY, APRIL 19TH
Banquet Session, Grim Hotel, 6:30 P. M.

FLOOR SHOW.

ADDRESS.

RECEPTION AND DANCE—9:30 P. M., Roof Garden.

SCIENTIFIC SESSION

WEDNESDAY, APRIL 20TH, 8:30 A. M.

"Hyperparathyroidism-Case Report"—W. F. Adams, Fort Smith.

"The Irritable Colon," S. F. Hoge, Little Rock.

"Allergy in General Practice," N. L. Miller, Oklahoma City.

"Irregular Menses," Alvin Strauss, Little Rock.

"The Female Castrate," G. R. Siegel and Earle A. Hunt, Clarksville.

"Controlling the Size of the Family," Fred Taussig, Saint Louis.

"Present Day Treatment of Varicose Veins" (illustrated), Karl Rosenbaum, Little Rock.

"Diagnosis and Treatment of Brain Tumors," Roland Klemme, Saint Louis.

"A Comparative Study of the Digestive and Reproductive Systems," (Illustrated) M. A. Baltz, Pocahontas.

HOUSE OF DELEGATES

WEDNESDAY, APRIL 20TH, 1:30 P. M.

CALLING MEETING TO ORDER—O. J. T. Johnston, President.

ROLL CALL.

REPORT OF NOMINATING COMMITTEE.

ELECTION OF OFFICERS:

- President-Elect.
- First Vice-President.
- Second Vice-President.
- Third Vice-President.
- Treasurer.
- Secretary.
- Five Councilors.
- Delegate to the American Medical Association.
- Alternate to the American Medical Association.

REPORT OF THE REFERENCE COMMITTEE.

REPORT OF COMMITTEES.

FURTHER NEW BUSINESS.

ADJOURNMENT.

FINAL GENERAL SESSION

WEDNESDAY, APRIL 20TH
(Immediately after adjournment of the House of Delegates)

CALLING MEETING TO ORDER—O. J. T. Johnston, President.

UNFINISHED BUSINESS.

PRESENTATION OF PRESIDENT S. J. WOLFERMANN.

PRESENTATION OF PRESIDENT-ELECT.

NEW BUSINESS.

ADJOURNMENT SINE DIE.

SCIENTIFIC EXHIBIT

"Syphilis"—American Social Hygiene Association.
Arkansas State Board of Health.

"Pathological Exhibit"—Obstetrical and Gynecological Departments, University of Arkansas School of Medicine.

"Surgical Specimens"—A. S. Buchanan, Prescott.

"Miscellaneous Fractures: Results"—F. Walter Carruthers, Little Rock.

"Plastic Surgery"—Ellery C. Gay, Little Rock.

"Skin and Syphilis"—D. W. Goldstein, Fort Smith.

"A New Apparatus for the Treatment of Peripheral Vascular Disease"— Holt-Krock Clinic, Fort Smith.

"Eye Photography"—Albert H. Mann, Texarkana.

Veterans Administration Facility, Fayetteville.

RESOLUTION

GEO. F. JACKSON

On January 25, 1938, the hand of Death plucked from our Society one of its most devoted members, Doctor George Franklin Jackson. For many years he had been a member of the Pulaski County Medical Society and had given unstintingly of his talents. A man of remarkable industry and tenacity of purpose, he had made an enviable record of accomplishment in his chosen profession.

His friends were legion, his interests far reaching. Civic, charitable, and religious organizations engaged much of his attention. These will miss his genial personality, his kindliness, his guidance, and cooperation.

We, the Pulaski County Medical Society, grieve over the loss of our faithful member and loyal friend—one who had ever been ready to serve and dependable in the performance of duty. The good he did will live after him.

With these few words we do homage to his soul and record our esteem and affection in the minutes of the Society.

With these few words, we express our heartfelt sympathy to the bereaved wife and mother.

Signed: O. C. Melson, Chairman
F. Walter Carruthers,,
R. M. Eubanks.

PROCEEDINGS OF SOCIETIES

The Arkansas State Pediatric Society will meet at the Grim Hotel, Texarkana, Monday, April 18th at 10:00 A. M., for the following program: "Case histories of all poliomyelitis cases admitted to City Hospital, Little Rock, spring-summer, 1937," Jerome Levy, Little Rock; "Pathology of all fatal cases admitted to City Hospital, Little Rock," A. F. DeGroat, Little Rock; "Orthopedic results in last year's epidemics," Vernon Newman, Little Rock; "Judging from recurrences in other states, the possibility of incidence of poliomyelitis in Arkansas this spring and summer," A. M. Washburn, Little Rock, and "Sulfanilamide treatment in children with particular reference to methemoglobinemia," Alexis Hartman, Saint Louis. A round table luncheon will follow the scientific program.

The Phillips County Medical Society was addressed February 24th by Lyle Motley, Memphis, on "Coronary Thrombosis."

The Jefferson County Medical Society met in dinner session at the Davis Hospital, Pine Bluff, March 1st. Among business items discussed was the matter of action against several unlicensed men and the appointment of a committee to work with the Junior Auxiliary in a prenatal clinic.

John K. Walker, Secretary.

The Fourth Councilor District Medical Society met in dinner session at Pine Bluff February 25th, electing the following officers: President, J. T. Palmer, Pine Bluff; Vice-President, Gibbs Biscoe, Dumas, and Secretary-treasurer, W. A. Snodgrass, Jr. Dr. O. J. T. Johnson, president, Arkansas Medical Society, discussed various activities of the state society and the following scientific program was presented: "Syphilis," Louie G. Martin, Hot Springs national Park, and "Luetic Heart Disease," S. C. Fulmer, Little Rock.

Crittenden County Medical Society has elected the following officers: President, T. S. Hare, Crawfordsville, and Secretary-treasurer, L. C. McVay, Marion.

The Pope-Yell County Medical Society met at St. Mary's Hospital, Russellville, February 17th for the following scientific program: "Why We Wear Glasses," L. Gardner, and "Toxemia of Pregnancy," Roy I. Millard. Officers elected are: R. L. Smith, president, and Roy I. Millard, Secretary-treasurer.

Roy I. Millard, Secretary.

The Ouachita County Medical Society met in regular monthly session March 3rd, at the Camden Hospital. After a delightful banquet served by the nurses the following program was rendered:

"The Value of X-ray in Obstetrics," J. T. Robinson, Texarkana; "Earache," R. R. Kirkpatrick, Texarkana, and "Hemorrhaging Ulcers of the Stomach and Duodenum," Harry Murry, Texarkana.

R. B. ROBINS, Secretary.

The Miller County Medical Society was addressed February 19th by F. Walter Carruthers, Little Rock, "Circulatory Diseases of the Extremities," and M. J. Kilbury, Little Rock, "Physiological and Pathological Sections of the Cervix and Uterus."

N. B. Daniel, Secretary.

The Pulaski County Medical Society was addressed March 21st by Joe H. Sanderlin, Little Rock, "The Climateric."

E. H. WHITE, Secretary.

The Benton County Medical Society met in dinner session at Bentonville, March 10th, the following scientific program being presented: "Diseases of the Coronary Arteries," M. W. Chastain, and "Diagnosis and Treatment of Coronary Thrombosis," E. A. Pickens.

GEO. M. LOVE, Secretary.

The Lawrence County Medical Society met at Imboden March 8th for the following program: "Undulant Fever," W. W. Hatcher, Imboden; "Pituiturin in Obstetrics," V. D. McAdams, Cord, and "Examination and Diagnosis," H. A. Stroud, Jonesboro.

The Sebastian County Medical Society was addressed March 8th by I. B. Oldham, Jr., "Traumatic Surgery of the Extremities"; F. W. Ewing, "The Male Climateric," and E. H. Coachman, "Diphtheria Carriers," all speakers of Muskogee, Oklahoma.

L. M. HENRY, Secretary.

The Tri-County Clinical Society met at Arkadelphia February 28th for the following program: "Some Allergic Conditions," Alan Cazort, Little Rock; "The Electrocardiogram," D. T. Hyatt, Little Rock, and "Dentistry in the Health Picture," M. D. Gibbs, D. D. S., Hot Springs National Park.

JAMES W. BRANCH, Secretary.

Craighead-Poinsett County Medical Society was addressed March 3rd by L. L. Fatheree on "The Control of Syphilis."

PERSONALS AND NEWS ITEMS

A. H. Maddox has been elected president of the Business and Professional Men's Club at Elaine.

T. H. Jones is erecting a hospital and office building at Waldo.

H. G. Hummell, Little Rock, has returned from a two months postgraduate course in New York city.

The following have been elected officers of the Arkansas Society of the Sons of the American Revolution: F. Vinsonhaler, Little Rock, 1st vice-president, and C. H. Dickerson, Conway, 2nd vice-president.

S. A. Thompson, Camden, took a postgraduate course in New Orleans during March.

W. S. Ellis, Fordyce, was among the registrants at the Dallas Clinical Society session in March.

Glenn Johnson and Bryce Cummins, Little Rock, attended short postgraduate study courses at Charity Hospital, New Orleans, during March.

Dr. and Mrs. D. W. Sloan, Beebe, visited in Tennessee, Florida and New Orleans during March.

D. T. Hyatt, Little Rock, addressed the North Little Rock Council of Parents and Teachers March 2nd on "Tuberculosis."

The March issue of Southern Medical Journal contains the following: "Tuberculosis Problems in Arkansas" by W. B. Grayson and A. M. Washburn, Little Rock; "A Simplified Apparatus for Pressure-Suction Therapy of Obliterative Arterial Disease of the Extremities," F. H. Krock, Fort Smith, and "Relationship of Medical Schools to Medical Ethics and Medical Economics," J. K. Donaldson, Little Rock.

The Mid-South Postgraduate Medical Assembly elected H. Fay H. Jones, Little Rock, president, and E. J. Horner, Jonesboro, vice-president for Arkansas, at its February meeting.

F. H. Krock, Fort Smith, has been relected chairman of the Sebastian County Red Cross chapter.

The new hospital of F. A. Gray at Batesville is expected to be ready for occupancy about July 1st.

L. L. Fatheree recently addressed the Jonesboro American Legion post on "Syphilis."

S. S. Beaty has been elected alderman at England.

R. B. Robins, Camden, addressed the student body of Hendrix College on "Training for Usefulness."

H. O. Walker has been relected mayor of Newport.

C. T. Chamberlain, recently addressed the Fort Smith Rotary Club on "Heart Disease."

The following officers have been elected by the Davis Hospital staff, Pine Bluff: Chairman, T. J. Cunningham; Vice-chairman, B. D. Luck, Jr., and Secretary, D. E. Lewis.

J. D. Riley, State Sanatorium, addressed the Phillips County Medical Society March 29th.

J. B. Askew, Batesville, is taking the public health course at Vanderbilt University. In his absence, J. J. Monfort, is acting as secretary of the Independence County Medical Society.

M. S. Craig has been elected president of the Batesville Kiwanis Club.

W. C. Langston, Little Rock, recently addressed the College of the Ozarks, Clarksville, on "Biological Anomalies."

The American Legion Child Welfare Conference at Little Rock March 13th was addressed by Val Parmley, Little Rock, and D. W. Goldstein, Fort Smith.

C. B. Billingsley, Fort Smith, addressed the Mountainburg P. T. A. March 11th on "Immunization Against Communicable Diseases in Childhood."

Under the heading "Presidents' Proscenium," the Journal of the Connecticut Medical Society published in its March issue, "Socialized Medicine and Health Insurance" by O. J. T. Johnston, President, Arkansas Medical Society.

Dr. and Mrs. J. E. Blakemore, Van Buren, celebrated their thirty-third wedding anniversary March 14th.

Elizabeth Fletcher, Little Rock, addressed the North Little Rock Junior High School Study Club recently on "The Adolescent Child."

C. E. Benefield, Fort Smith, attended the Dallas Southern Clinical Society session in March.

O. R. Kelly, Sheridan, took postgraduate work in New Orleans during March.

A. S. Buchanan has been elected president of the Prescott Athletic Association.

Harvey Shipp, Little Rock, has completed a three weeks postgraduate course with the Lahey Clinic.

E. J. Byrd, Bearden, and R. R. Robins, Camden, have been elected directors of the Ouachita County Tuberculosis Association.

OBITUARY

BENJAMIN L. HARRISON, aged 70, of Trumann, died at a Jonesboro hospital February 19th. Born and reared at Owensboro, Kentucky, he graduated from Barnes Medical College, St. Louis, in 1899. Moving to Jonesboro, he served as penitentiary physician from 1912 to 1916 and had since practiced at Trumann. He was a charter member of the Craighead-Poinsett County Medical Society, a past president of the Trumann Lions Club, a member of the Poinsett County Farm Adjustment Board, a Mason, a former member of the St. Francis Levee Board and a member of the Methodist church. Surviving relatives are his wife, a son, a daughter, a step-daughter and a step-son.

WILLIAM WOODWORD EASTERLING, aged 68, died at his home in Lake Village February 21st of a heart attack. He had had influenza for two weeks but had sufficiently recovered to return to his office for a few days prior to his death. Born April 19, 1869 in Texas, he graduated from the New York University Medical College in 1889 and began the practice of medicine in Mississippi when but twenty years of age. In 1894 he moved to Grand Lake, Arkansas, and then to Eudora, where he was married to Miss Ella Horner in 1895. Mrs. Easterling died in 1926. He had actively engaged in the practice of medicine throughout the years, being especially interested in the diseases of children. He served several terms as county health officer. Surviving relatives are the children, Dudley Easterling, Chicot; Miss Maggie Easterling, Eudora; and Dr. Walter Easterling; a sister and a brother.

HENRY PACE, aged 65 years, died at his home in Eureka Springs March 13th. Born at Harrison, he had been a resident of Eureka Springs for the past 33 years. He was a graduate of the Washington University School of Medicine in 1903 and a member of the Carroll County Medical Society and a fellow of the American Medical Association. Surviving relatives are his wife, a son and a daughter, a brother and three sisters.

RANDOM THOUGHTS OF THE SECRETARY

Feb. 28th. In a deluge without comparison membership assessments pile in, forcing this office to work overtime but with glee. There ensues, of course, the customary amount of detail in obtaining full data on new members, correcting changes of addresses and the like, the occurrence of which shall not be minimized until utopia shall be our state.

March 1st. On this date a former patient of a prominent local dermatologist consults us, affording the opportunity of making a fantastic case report to this colleague of ours.

March 3rd. Freer and Amis are the only fans this column has heard from in months; Freer making the only complimentary remarks.

March 4th. Goldstein reports on his appearance before the student body of the University of Arkansas, the attendance figures as given necessitating a check on our part.

March 6th. This date we note a collection of photographs in the high school paper, captioned "Among Those Who Made History in Fort Smith High School." Since Eberle and Foster appear in this group we consider that history is but the recording of events in the lives of a people and a nation.

March 8th. The Muskogee crowd visits the county society and we have the most enthusiastic meeting in months. So much so that no one brings to mind that this was the night for election of delegates—a rather remarkable situation—Sebastian county members overlooking an opportunity to vote.

March 11th. Comfortably placed in a chair with robe and slippers at eight this evening. Wolfermann calls to remind us that we were due at a committee meeting at seven-thirty, our belated arrival being the occasion for considerable harassment.

March 12th. With Krock and Foltz to Fayetteville, where with E. F. Ellis and Alfred Hathcock, we conduct a searching examination of an individual who has suffered one of those low-back injuries, the plethora of medical talent contributing no new light on this pathological state, and further convinced that a kindly-disposed jury can offer much more in the way of therapy. And with the Chamberlains, Amis and a certain sedate faculty couple we hie forth to the final cotillion club dance where there is much merriment and where the cornetist liked the party so much that he did not want to quit playing.

March 15th. In a hectic manner we put this issue in press and wait to see how many errors will show up in the preliminary program. A final thought: We have not been away from home so much these past weeks.

We respectfully recommend to the profession careful perusal of their own journals where official actions taken by the organized profession will be fully reported. It is in these and not in the headlines of the daily lay press that our members will learn what actually was done.—The New York Medical Week.

PRELIMINARY PROGRAM
WOMAN'S AUXILIARY
TO THE
ARKANSAS MEDICAL SOCIETY
FOURTEENTH ANNUAL MEETING
TEXARKANA, ARKANSAS
HEADQUARTERS: McCARTNEY HOTEL

OFFICERS

PRESIDENT—Mrs. Curtis W. Jones, Benton.
PRESIDENT-ELECT—Mrs. J. B. Crawford, El Dorado.
FIRST VICE PRESIDENT—Mrs. C. E. Kitchens, DeQueen.
SECOND VICE PRESIDENT—Mrs. O. J. T. Johnston, Batesville.
THIRD VICE PRESIDENT—Mrs. S. J. Wolfermann, Fort Smith.
FOURTH VICE PRESIDENT—Mrs. S. C. Fulmer, Little Rock.
PARLIAMENTARIAN—Mrs. Loyce Hathcock, Fayetteville.
HSTORIAN—Mrs. C. W. Garrison, Little Rock.
SECRETARY—Mrs. B. A. Bennett, 2620 State St., Little Rock.
TREASURER—Mrs. W. E. Gray, Jr., Hot Springs National Park.
PUBLICITY SECRETARY—Mrs. H. E. Murry, 1700 Beech St., Texarkana.

COUNCILORS

Mrs. Wm. Hibbitts, Texarkana
Mrs. B. A. Rhinehart, Little Rock
Mrs. P. H. Phillips, Ashdown
Mrs. Marcus T. Smith, Conway
Mrs. J. T. McLain, Gurdon.

ADVISORY BOARD

Dr. Don Smith, Hope
Dr. L. F. Barrier, Little Rock
Dr. Hoyt Allen, Little Rock

COMMITTEE CHAIRMEN

ORGANIZATION—Mrs. C. E. Kitchens, DeQueen.
EDUCATION AND PUBLIC HEALTH—Mrs. O. J. T. Johnston, Batesville.
ILSE F. OATES LOAN FUND—Mrs. Chas. E. Oates, North Little Rock.
PUBLIC RELATIONS—Mrs. S. J. Wolfermann, Fort Smith.
HYGEIA—Mrs. S. C. Fulmer, Little Rock.
CONSTITUTION AND BY-LAWS—Mrs. S. A. Collom, Texarkana.
MEMORIAL—Mrs. H. King Wade, Hot Springs National Park.
FINANCE—Mrs. T. E. Buffington, Benton.
EXHIBITS—Mrs. J. C. Cunningham, Little Rock.
PHYSICAL HEALTH EXAMINATION—Mrs. Pierre Redman, Mena.
ARCHIVES—Mrs. K. W. Cosgrove, Little Rock.

DISTRICT COUNCILORS

Mrs. T. S. Hare, Crawfordsville.
Mrs. C. G. Hinkle, Batesville.
Mrs. J. T. Porter, Hazen.
Mrs. Charles Dixon, Gould.
Mrs. R. B. Robins, Camden.
Mrs. P. H. Phillips, Ashdown.

Mrs. John Proctor, Hot Springs National Park.
Mrs. R. C. Kory, Little Rock.
Mrs. D. K. McCurry, Green Forest.
Mrs. W. R. Brooksher, Fort Smith.

PROGRAM

MONDAY, APRIL 18, 1938

9:00 A. M.—REGISTRATION—McCartney Hotel.

10:00 A. M.—EXECUTIVE BOARD MEETING—Hotel McCartney.

12:00 M.—COUNTY PRESIDENTS' LUNCHEON—Hotel McCartney.

GENERAL SESSION

2:00 P. M.—OPENING OF MEETING—Mrs. N. B. Daniel, President, Miller County Auxiliary.
INVOCATION—Rev. Marion Vinion, Pastor First Methodist Church, Texarkana.
ADDRESS OF WELCOME—Mrs. S. A. Collom, Sr.
INTRODUCTION OF STATE PRESIDENT—Mrs. Curtis W. Jones, by Mrs. N. B. Daniel.
RESPONSE TO ADDRESS OF WELCOME—Mrs. O. J. T. Johnston, Batesville.
REPORTS OF OFFICERS.
REPORTS OF COMMITTEE CHAIRMEN.
REPORT OF A. M. A. AUXILIARY CONVENTION—Mrs. Wm. Hibbitts, Vice-President, Woman's Auxiliary to the American Medical Association.
REPORT OF SOUTHERN MEDICAL AUXILIARY—Mrs. Allen Collom.
REPORT OF ENTERTAINMENT COMMITTEE.

4:00 P. M.—Tea—At the home of Mrs. N. B. Daniel, 908 Pine Street.

EVENING SESSION

8:00 P. M.
Texarkana Auditorium
Public Session

CALLING THE MEETING TO ORDER—W. Decker Smith, President, Miller County Medical Society, Texarkana.

INVOCATION — Rev. Harry DeVore, First Methodist Church.

INTRODUCTION OF DISTINGUISHED GUESTS—O. J. T. Johnston, President, Arkansas Medical Society.

ADDRESS—**"The Menace of Cancer,"** J. Shelton Horsley, Richmond, Virginia.

ADDRESS—**"Present-Day Problems in the Medical Profession,"** J. H. J. Upham, President, American Medical Association, Columbus, Ohio.

BENEDICTION—Rev. Tom Wilbanks, Pine Street Presbyterian Church, Texarkana.

MEMORIAL SESSION

TUESDAY, APRIL 19TH, 8:00 A. M.
FIRST BAPTIST CHURCH

CALLING MEETING TO ORDER—O. J. T. Johnston, President, Arkansas Medical Society.

INVOCATION—Rev. J. T. Wilbanks.

VIOLIN SOLO—"Ave Maria" (Shubert),
Mrs. Philip King Alston, accompanied by
Mrs. Lloyd White at the organ.

ADDRESS—Mrs. H. King Wade, Hot Springs National Park.

ADDRESS—E. E. Barlow, Dermott.

VOCAL SOLO—"Eye Hath Not Seen" (The Holy City)
Mrs. Will Quinn, accompanied by
Mrs. Lloyd White at the organ.

BENEDICTION—Rev. F. E. Maddox.

Mrs. T. M. Fly, Little Rock, September 28th.

GENERAL SESSION

TUESDAY, APRIL 19, 1937

9:30 A. M.—BUSINESS SESSION—Mrs. Curtis W. Jones, presiding.
INVOCATION—Rev. O. L. Graham, First Presbyterian Church, Texarkana.
READING OF MINUTES.
ADDRESS—Dr. O. J. T. Johnston, President, Arkansas Medical Society. "What the Auxiliary means to the doctors and the doctors' appreciation of the Auxiliary."
ROLL CALL.
TREASURER'S REPORT—Mrs. W. E. Gray, Jr. Hot Springs.
REPORTS OF COUNTY PRESIDENTS.
REPORT OF REGISTRATION AND CREDENTIAL COMMITTEE.
ELECTION OF OFFICERS.

1:00 P. M. —LUNCHEON—Country Club. Mrs. N. B. Daniel, Toastmistress.
INTRODUCTION OF PAST PRESIDENTS AND VISITORS.
INTRODUCTION OF HONOR GUEST.
PRESIDENT'S ADDRESS—Mrs. Curtis W. Jones.
INSTALLATION OF OFFICERS.
INCOMING PRESIDENT'S ADDRESS—Mrs. J. B. Crawford, Pine Bluff.

3:30 P. M.—POST-CONVENTION BOARD MEETING—Mrs. J. B. Crawford, Presiding.

TUESDAY, APRIL 19TH
Banquet Session, Grim Hotel, 6:30 P. M.

FLOOR SHOW.

ADDRESS.

RECEPTION AND DANCE—9:30 P. M., Roof Garden.

COMMITTEES

EXECUTIVE BOARD LUNCHEON
Mesdames Wm. Hibbitts, H. E. Murry, P. H. Phillips, A. W. Roberts, W. Decker Smith.

ENTERTAINMENT COMMITTEE (TEA)
Mesdames R. Baskett, S. A. Collom, L. H. Lanier E. L. Beck, R. C. Cross, Ruel Robbins, T. J. Kittrell, Joe Tyson.

AUXILIARY LUNCHEON COMMITTEE
Mesdames L. J. Kosminsky, Allen Collom, H. E. Longino, T. F. Kittrell, R. W. Pickett, A. H. Mann, J. T. Robison, P. H. Phillips.

COURTESY COMMITTEE
Mesdames R. W. Pickett, R. C. Cross, E. M. Watts, E. L. Beck, C. A. Smith, Allen Collom, S. A. Collom, J. R. Dale, Rodney Dale.

TRANSPORTATION COMMITTEE

Mesdames Ruel Robins, J. T. Robison, H. E. Longino, J. F. Williams, M. F. McAlister, C. A. Smith, T. F. Kittrell, E. L. Beck, S. A. Collom, Allen Collom, Dr. Frances Spinka.

PROGRAM COMMITTEE

Mesdames S. A. Collom, H. E. Murry, Wm. Hibbitts.

ENTERTAINMENT COMMITTEE

Mesdames L. J. Kosminsky, W. Decker Smith, T. E. Fuller, J. T. Robison, H. E. Murry, R. W. Pickett.

DECORATION COMMITTEE

Mesdames T. E. Fuller, J. T. Robison, A. W. Roberts, Joe Tyson, R. C. Cross.

MUSIC COMMITTEE

Mesdames L. H. Lanier, Joe Tyson, Decker Smith, E. M. Watts, Ruel Robbins, P. H. Phillips, H. E. Longino, E. L. Beck, J. F. Williams, R. C. Cross.

MEMORIAL COMMITTEE

Mesdames J. T. Robison, E. L. Beck, J. R. Dale, Allen Collom, T. F. Kittrell.

COUNTY PRESIDENTS—1937-38

Arkansas—Mrs. R. H. Whitehead, DeWitt.
Carroll—Mrs. Ulys Jackson, Harrison.
Clark-Nevada-Hempstead—Mrs. R. L. Bryant, Arkadelphia.
Crittenden—Mrs. J. H. Matthews, Earle.
Garland—Mrs. Leon King, Hot Springs.
Independence—Mrs. Frank Gray, Batesville.
Johnson—Mrs. G. R. Siegel, Clarksville.
Lonoke-Prairie—Mrs. T. E. Benton, Lonoke.
Miller—Mrs. N. B. Daniel, Texarkana.
Ouachita—Mrs. R. B. Robins, Camden.
Pulaski—Mrs. Bryce Cummins, Little Rock.
Saline—Mrs. John Ashby, Benton.
Sebastian—Mrs. J. S. Southard, Fort Smith.
Southeast Arkansas—Mrs. M. C. Crandall, Wilmot.
Sevier—Mrs. R. C. Dickinson, Horatio.
Union—Mrs. J. K. Sheppard, El Dorado.
Washington—Mrs. F. R. Morrow, Fayetteville.
1st District—Mrs. T. S. Hare, Crawfordsville.
3rd District—Mrs. E. D. McKnight, Brinkley.
5th District—Mrs. R. B. Robins, Camden.
9th District—Mrs. Lloyd Jackson, Harrison.

AUXILIARY NEWS

The Independence County Medical Society and Woman's Auxiliary were joint hosts at a dinner at the Batesville Country Club February 11th, honoring Dr. O. J. T. Johnston, a member of the first named, and president of the Arkansas Medical Society. Dr. Johnston and Mrs. Johnston, second vice-president of the Arkansas Auxiliary, were seated at the head of the table, while Dr. Chas. G. Hinkle and Mrs. Hinkle, past president of the state auxiliary, and Dr. Frank A. Gray and Mrs. Gray, president of the county auxiliary, were placed on either side of them.

Centering the long damask covered table was a silver candelabra holding lighted tapers, placed on a large red heart which had a lace edge to form a valentine and a smaller design decorated either end of the table. Up and down the long table were rows of red hearts, and each place was marked with a valentine on which was written a comic verse bearing on the medical profession. These were read aloud during the evening.

After the invocation by Dr. L. T. Evans, a fine tribute was paid Dr. Johnston by Dr. Hinkle who referred to the pride felt by the society that one of their number had been chosen to serve as head of the state organization and of pride in his leadership in the administration. Dr. Johnston responded in a brief talk. At the conclusion of the dinner, Mrs. Gray, in a gracious speech, presented Dr. Johnston with a handsome brown leather fitted traveling case with his name in gold letters from the Society and the Auxiliary as a token of the high regard in which he is held. Dr. Johnston expressed his appreciation in a speech. Mrs. Gray then presented Mrs. Johnston with a valentine box of candy in recognition of her leadership in the county and state auxiliary, to which Mrs. Johnson made a response. Separate sessions were held by the two organizations with Dr. C. G. Hinkle, vice-president of the county society, presiding over the scientific session of that group. The following was presented: "Rehabilitation Tenants and Medical Problems," Dr. I. M. Huskey; "Two Forms of Hospital and Medical Insurance Problems—with Criticisms," Dr. J. J. Monfort; "Oral Sepsis and Its Relation to Systemic Infection," Dr. A. D. Matthews; and "Our Responsibility to the Public," Dr. Johnston.

Mrs. Gray presided over the business session of the Auxiliary and presented Dr. Johnston who spoke on "What the Auxiliary Means to the Doctor." The program was presented by Mrs. Victoria Saylors who mixed humor with the proceedings. Mrs. L. T. Evans read a paper on "Incorrect and Correct Posture." Mrs. R. C. Dorr was personal commentator as all of those present participated in a skit arranged by the leader.

The annual Christmas tree gift exchange of the Independence County Medical Society Auxiliary was held at the Churchman's Club December 7th, following the dinner at a local hotel. Symbols of the approaching holiday season decorated the rooms with a beautifully decorated tree as a distinct attraction. A brief business session was presided over by the President, Mrs. F. A. Gray, and was concluded with an informal program presented by Mrs. R. C. Dorr, in which all present participated. Mrs. J. B. Askew, wife of the director of the county health unit, a recent bride, was present and was added as a new member to the auxiliary. Besides those mentioned, others present were Mesdames Charles G. Hinkle, J. H. Kennerly, T. N. Rodman, L. T. Evans, O. J. T. Johnston, Victoria Saylors, J. J. Monfort, Misses Mary Beard and Sallie Crow, Mrs. I. M. Huskey of Cave City, Mrs. Paul H. Jeffery, of Bethesda, Mrs. O. L. Bone of Newark. The auxiliary voted to remember Mrs. M. S. Craig, who has been sick for so long, with a beautiful bouquet of flowers as a Christmas gift and voted to contribute 10c a member as Christmas gifts to the children of the Nurses School.

Mrs. I. G. Jones and Mrs. G. L. Kimball entertained the members of the Sevier County Medical Auxiliary, December 9th with a 1 o'clock luncheon at the Hotel Barlow.

Mrs. C. E. Kitchens started the review of Heiser's "An American Doctor's Odyssey," by giving a most interesting review of the first three chapters. The meeting date was changed to the fourth Thursday for future meetings. The Auxiliary voted to buy a tuberculosis seal bond.

The following members were present: Mrs. R. C. Dickinson, Mrs. Clarence Hooper, Mrs. Leonard Hampson, Miss Elinor Park, Mrs. R. L. Hopson, Mrs. C. E. Kitchens, Mrs. C. A. Archer, Mrs. A. J. Clingan, Mrs. C. M. Gore, Mrs. O. B. Tate, Mrs. J. B. Tate, Mrs. J. S. Hendricks and Mrs. G. L. Kimball.

The Sevier County Medical Society and Auxiliary met Wednesday evening, December 15th, at the home of Dr. and Mrs. C. M. Gore. Turkey dinner was served. Christmas approach was signaled by the decorations of the rooms. Covers were laid for Dr. and Mrs. R. C. Dickinson, Dr. and Mrs. J. C. Graves, Dr. and Mrs. I. G. Jones, Dr. M. L. Norwood, Mr. and Mrs. Leonard Hampson, Dr. Manning, Mrs. J. L. Clingan, Dr. and Mrs. G. L. Kimball, Dr. and Mrs. O. B. Tate, Dr. and Mrs. C. C. Thompson, Dr. and Mrs. C. E. Kitchens, Dr. and Mrs. R. L. Hopkins, Dr. and Mrs. C. A. Archer, Dr. and Mrs. J. S. Hendricks, Dr. C. C. Hanchey, and Dr. and Mrs. Gore.

The Sevier County Medical Society was entertained January 27th, at the home of Mrs. C. A. Archer. A review of the "An American Doctor's Odyssey" was given by Mrs. J. S. Hendricks. It was announced that each member had completed a medical physical health examination. The next meeting will be the fourth Thursday in February at the home of Mrs. R. L. Hopkins. A lovely plate was served by the hostess, Mrs. Archer, to Mrs. R. C. Dickinson and Mrs. Clarence Hooper, Horatio; Mrs. C. E. Kitchens, Mrs. C. M. Gore, Mrs. J. A. Clingan, Mrs. C. C. Thompson, Mrs. R. L. Hopkins, Mrs. O. B. Tate and Mrs. J. S. Hendricks.

The February meeting of the Pulaski County Medical Society Auxiliary was held on February 16 at the Woman's City Club. Presidents of the federated clubs were present. Speakers for this public relations meeting Mrs. Curtis Jones of Benton, president of the Arkansas Medical Society Auxiliary, and Dr. R. M. Blakely, president of the Pulaski County Medical Society, who spoke on periodic health examinations. Tea was served following the meeting.

Ladies Auxiliary, Ouachita County Medical Society, officers: Mrs. R. B. Robins of Camden, president; Mrs. T. C. Rhyne of Thornton, vice-president; Mrs. Rowland Robins, secretary.

Woman's Auxiliary to the Bowie and Miller Counties Medical Societies, under the direction of the public relations committee, entertained members and representatives of 35 women's clubs of Texarkana, whose work embraces health programs, February 23rd at Hotel Grim. The occasion was in recognition of Doctor's Day, originated by Mrs. J. Bonner White of Georgia in tribute to the able work of doctors of medicine who hold the health of the nation in their hands. Mrs. J. T. Robison, who is widely recognized as a book reviewer of much ability, gave in her usual fine style, "Madame Curie," the life of the famous discoverer of radium, written by the scientist's daughter, Eve Curie. Following the review, Dr. Frances Spinka gave an interesting and instructive talk on "Radium." Miss Ruth Walker sang two beautiful songs, accompanied by Mrs. William Hibbitts. The public relations committee is composed of Mrs. L. H. Lanier, Mrs. S. A. Collom, Mrs. William Hibbitts and Mrs. Albert Mann. Mrs. Lanier, chairman, presided over the meeting. After the program, Mrs. Ralph Cross, president-elect, served punch and cookies, assisted by other members of the auxiliary.

At a called meeting of the Woman's Auxiliary to the Bowie and Miller Counties Medical Society, held at the home of Mrs. S. A. Collom, Mrs. Roy Baskett was elected president of the group. Other officers elected were: President-elect, Mrs. Ralph Cross; first vice-president, Mrs. Joe Tyson; second vice-president Mrs. Harry E. Murry; third vice-president, Mrs. J. T. Robison; fourth vice president, Mrs. E. M. Watts; recording secretary, Mrs. Allen Collom; treasurer, Mrs. Ruel Robbins; historian, Mrs. L. J. Kosminsky; publicity chairman, Mrs. L. H. Lanier; and parliamentarian, Mrs. Wm. Hibbitts.

Auxiliary members of the Sebastian County Medical Society and Washington County Medical Society met March 7th for a 1 o'clock luncheon at the Washington hotel in Fayetteville.

Mrs. Curtis Jones, of Benton, state president of the Arkansas Auxiliary, was a guest of honor, making the occasion her official visit to the Northwest district. She gave an informal talk on "How to Utilize Our Time," based on a health program.

Mrs. Fred Morrow, president of the Washington county auxiliary, was out of the city, and Mrs. Loyce Hathcock presided and introduced the honor guest.

Sebastian county auxiliary members who attended were Mrs. J. S. Southard, president of the local unit, Mrs. W. R. Brooksher, Jr., Mrs. Walter G. Eberle, Mrs. M. E. Foster, Mrs. D. W. Goldstein, Mrs. Fred G. Krock, Mrs. Eugene Stevenson, Mrs. C. S. Bungart, Mrs. Charles Chamberlain, Mrs. W. F. Rose, all of Fort Smith, and Mrs. S. P. McConnell, of Booneville.

Those from Washington county were Mrs. R. T. Henry, Springdale, Mrs. H. H. Howze, Mrs. F. N. Gordon, Mrs. R. H. Huntington, Mrs. Loyce Hathcock and Mrs. C. B. Cullen, all of Fayetteville.

MRS. W. F. ROSE,
Publicity chairman for the Woman's Auxiliary of the Sebastian County Medical Society.

BOOK REVIEWS

The Diagnosis and Treatment of Sexual Disorders in the Male and Female. By Max Huhner, M. D., formerly Chief of Clinic, Genitourinary Department, Mount Sinai Hospital Dispensary; Attending Genitourinary Surgeon, Bellevue Hospital, Outpatient Department; Assistant Gynecologist, Mount Sinai Hospital Dispensary, New York City. Pp. 490. Illustrated. Price $5.00. Philadelphia: F. A. Davis Company, 1937.

The various editions and repeated reprintings of this book are ample evidence of its value and general acceptance. The author seeks an organic, rather than a psychic, basis for aberrations. Considerable space is devoted to controversies which will not interest the general reader. Contraception is not discussed. The book supplies a definite need of the profession.

A Primer for Diabetic Patients. By Russell M. Wilder, M. D., Ph.D., F. A. C. P., Professor and Chief of the Department of Medicine of The Mayo Foundation, University of Minnesota; Head of Section on General Metabolism, Division of Medicine, The Mayo Clinic. Sixth Edition, Reset. 191 pages. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, $1.75 net.

A valuable volume for both the physician and the diabetic patient. A close study of this text by the patient makes the task of diabetic management much simpler for the physician. The questions of the patient are answered in simple terms, and the necessity for strict adherence to orders from his doctor are explained. A quiz section at the end of each chapter impress the facts upon the reader. The latest advances in the treatment of diabetes are discussed satisfactorily.

Practical Bacteriology, Hematology and Animal Parasitology. By E. R. Stitt, M. D., Sc. D., LL. D., Rear Admiral, Medical Corps, Surgeon General, U. S. N. (Ret.) and Paul W. Clough, M. D., Chief of Diagnostic Clinic, Johns Hopkins University; Associate in Medicine, Johns Hopkins University, and Mildred C. Clough, M. D., formerly Fellow in Bacteriology and Instructor in Medicine, Johns Hopkins University. 9th edition. 208 illustrations, 4 in colors. Pp. 961. Price $7.00. Philadelphia: P. Blakiston's Son and Company, Inc., 1937.

The ninth edition of this well known book has been rewritten with the addition of 113 pages. Laboratory procedures are correlated with clinical features of disease, which not only makes it an excellent volume for the physician and medical student but for the laboratory worker as well. The greatest revision of the book is in that part dealing with hematology.

A Textbook of Hematology. By William Magner, M. D., D. P. H., Pathologist, St. Michael's Hospital, Toronto; Lecturer in Pathology, University of Toronto. With 3 charts. 3 colored plates. 23 illustrations. Pp. 395. Price $4.50. Philadelphia: P. Blakiston's Son and Company, Inc., 1937.

This book will appeal to the practicing physician more than to the laboratory worker. It is fairly well illustrated with microphotographs and goes into detail concerning the origin and development of the blood cells. The author believes this knowledge to be of prime importance to the proper interpretation of pathological blood pictures. Changes in the blood and tissues due to disorders of the hemopoietic system are fully but concisely given.

Materia Medica, Pharmacology, Therapeutics and Prescription Writing. By Walter Arthur Bastedo, Ph. M., M. D., Sc. D., F. A. C. P., New York, Consulting physician, St. Luke's Hospital, New York, St. Vincent's Hospital, Staten Island, and Staten Island Hospital; President, United Pharmacopeial Convention 1930-1940; Member, Revision Committee U. S. Pharmacopeia; former Curator, New York Botanical Garden; Attending Physician, City Hospital, New York; Instructor in Pharmacology, Cornell University; Associate in Pharmacology and Therapeutics, and Assistant Clinical Professor of Medicine, Columbia University. 778 pp. 81 illustrations. Fourth Edition, reset, Cloth, $6.50. W. B. Saunders Company, Philadelphia, 1937.

The fourth edition of this recognized text book has undergone a general revision. The book is divided into three parts. The first part includes the introduction, weights and measures, dosage, methods of administration, the site of action and, in general, the ground work for scientific understanding and use of drugs. The second part deals with the individual remedies and classifies them as to their actions. The third part of the book is a concise, thorough treatise on prescription writing.

The author is to be complimented upon the easy reading of the entire volume. Facts desired about each individual drug can be procured at a glance. The newer remedies, including protamine zinc insulin and sulfanilamide are discussed. One of the better chapters of the book deals with hormones and discusses thoroughly the scope of modern knowledge in regard to substitution therapy for endocrine disorders.

Physiology in Modern Medicine. By Philip Bard, Ph. D., with the colloboration of Henry C. Bazett, M. A., M. D., George R. Cowgill, B. A., Ph. D., Harry Eagle, M. D., Chalmers L. Gemmill, M. D., Magnus I. Gregerson, M. D., Ph. D., Roy G. Hoskins, M. D., J. M. D. Olmsted, A. M., Ph. D., and Carl F. Schmidt, M. D. Eighth edition. Illustrated. Pp. 1051. Price $8.50. Saint Louis: C. V. Mosby Company, 1938.

This book is specifically written for the practicing physician who wishes to keep informed on the progress in the field of physiology. A noteworthy feature is the typography: regular style type is used for material of general informative nature, while smaller type is used for data of possible secondary value, the description of methods, the treatment of such matters which are still controversial and for material of clinical interest. This is an excellent text on physiology as well as a reference source.

The Traffic In Health. By Charles Solomon, M. D., New York, New York. Pp. 393. Price $2.75. New York: Navarre Publishing Company, 1937.

Designed for reading by the laity this volume will be of considerable interest to the medical man. The patent medicine racket, habit-forming drugs, cosmetics, cathartics, are all intelligently and clearly presented for the lay reader. The book has a definite reference value to the physician who is asked for an opinion on some patent medicine or cosmetic.

The Physician's Vitamin Reference Book. Published by E. R. Squibb and Sons, New York, 1938.

This is a most convenient volume; a concise compend on the subject of vitamins. The clinical vitamin deficiency states are discussed.

Theoretical Principles of Roentgen Therapy. Edited by Ernest A. Pohle, M. D., Ph. D., F. A. C. R., Professor of Radiology, Chairman, Department of Radiology and Physical Therapy, University of Wisconsin, Madison Wisconsin. Contributors: R. R. Newell, M. D., Ernst A. Pohle, M. D., K. Wilhelm Stenstrom, Ph. D., Lauriston S. Taylor, Ph. D., and Francis Carter Wood, M. D. Pp. 271. 132 illustrations. Price $4.50. Philadelphia: Lea and Febiger, 1938.

This work deals exclusively with the theoretical principles of roentgen therapy but is of primary interest to both roentgen therapists and research workers. The contributors are authorities and leaders. In a remarkable way this book presents the subject for the benefit of both physicians and physicists. The basic facts of the physics of roentgen rays, the function and construction of apparatus, dosimetry and the reaction of normal and diseased tissue to irradiation are clearly discussed. The recommendations of the International Committee for safety are incorporated in part five. This is a most valuable text for radiologists.

Twenty-Five Years of Health Progress. By Louis I. Dublin, Ph. D., and Alfred J. Lotka, D. Sc., with the colloboration of the staff of the Statistical Bureau of the Metropolitan Life Insurance Company, New York. New York: Metropolitan Life Insurance Company, 1937.

In a series of fascinating graphs and sets of figures, the like of which we have never before read, the authors review comprehensively the health history of the American people for the past twenty-five years. The main emphasis is, of course, related to the vital statistics of the industrial policy holders of this insurance company, but wherever possible, these are compared with those of the general population. Such trends in health and mortality as this selected group may show reflects changes in the entire population and this is well shown by the authors. A contrasting list of the ten leading causes of death in 1911 and a similar table for 1935 emphasize the progress made in the eradication and restriction of certain diseases, mainly those of infectious or contagious etiology. The volume is of great value for reference but we can rather enthusiastically recommend it for the interest its figures will arouse.

California Medical-Economic Survey: 1934-1935. Pp. 220. San Francisco: California Medical Association, 1937.

In this volume the factual data of a survey, co-sponsored by the California Medical Association and California Department of Health, is reported upon. Of the total cost of this survey, $103,000, the medical society contributed $46,000, the state and federal governments, $55,000. Probably the most important revelation is the fact that but 5.7 per cent of the population of California which required medical care, did not get such attention. The data will be of great value in the controversies which continually harass the medical profession in all states.

Recent Advances in Pulmonary Tuberculosis. By L. S. Burrell, M. D. (Cantab), F. R. C. P. (London). Third Edition. Pp. 320, 48 plates and 22 text figures. Price $5.00. Philadelphia: P. Blakiston's Son and Company, Inc., 1937.

This volume capably discusses prevention, diagnosis, roentgenology, childhood tuberculosis and treatment in all its ramifications. The author is impressed with the advances of surgical treatment although he feels that radical intervention is to be avoided if possible.

Treatment in General Practice: By Harry Beckman, M. D., Professor of Pharmacology at Marquette University, School of Medicine, Milwaukee, Wisconsin. Third Edition, Revised and Entirely Reset. 787 pages. Philadelphia and London: W. B. Saunders Company, 1938. Cloth, $10.00 net.

This book is a valuable asset to any physician's library. The author, through his two previous editions, has gained knowledge as to the fundamental information required by the general practitioner. The two previous editions have made it possible for superfluous subjects to be left out and those most sought after in general practice to be added to this third edition. Diseases and physical impairments confronting the general practitioner are well covered in this volume, starting with anthrax and ending with burns of the eye. Each particular chapter covers its field in a clear cut manner and in addition lists a well diversified treatment. The author's classification of endocrine disturbances is well worth any physician's time in reading or reference. This book has made available under one cover a great deal of sound treatment that will not only serve the older general practitioner, but will be of great assistance to the young man just out of school.

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THE IRRITABLE HEART AND ITS ACCOMPANIMENTS*

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The irritable heart is not represented on the pathologist's shelves. Its importance lies in the fact that, despite the lack of morbid changes, it still is a prominent cause of disability, which at times assumes extreme proportions. In less marked degrees, it occurs with great frequency.

The layman's knowledge of the importance of the heart to the maintenance of life, the publicity which has been given to cardiac deaths and the highly dramatic value placed on heart disease in general are unquestionably responsible for the display of undue interest and anxiety by an individual who becomes aware of the action of his heart. That this anxiety frequently assumes the proportions of a crippling neurosis is not to be wondered at. Moreover, as an accessory to this natural trend of thought, the physician's attitude is far too frequently directly responsible for cementing irreparably this self-styled conviction. This can occur in one of two ways. First, the inability to disclose demonstrable organic disease in the heart (or elsewhere) may prompt the feeling that there is "nothing wrong" with the patient; in this case, the term "functional" becomes synonymous with "imaginary." To the patient, these subjective feelings are far from imaginary and any attitude which casts doubt on the reality of his symptoms or the veracity of his statements will certainly accomplish nothing in the way of reassuring a distressed patient. Merely to dismiss the lengthy and superlatively described discomforts with the suggestion that they are merely "due to his nerves," however true this may be, will lack both originality (since he has in all probability already been told so) and purpose (since he will no doubt seek relief elsewhere—far too frequently from an exploiting cultist). Second, because the symptoms and objective manifestations associated with the irritable heart superficially mimic organic heart disease, the physician is actually led to confirm the patient's fears and to treat him accordingly. Such a diagnosis is usually accepted by the patient in view of the apparent agreement which exists between the symptoms which he experiences and the information he receives. Moreover, any opinion subsequently expressed to the contrary will be entertained only with skepticism by the patient, since, according to his own reasoning, everything has been adequately explained. It is amazing how readily a patient, under these circumstances, will willingly acquiesce to months of confinement in bed. This contrasts strongly with the difficulty encountered at times in successfully limiting the activities of those who actually have severe heart disease. It thus becomes apparent how such a patient may be destined to fall prey either to the Scylla of neglect or to the Charybdis of oversolicitious attention.

The patient who has an irritable heart may complain of palpitation, shortness of breath, or precordial distress; one or all of these symptoms may be present. There is frequently evidence of vasomotor instability. Two common cardiac accompaniments are extrasystolic arrhythmia and attacks of paroxysmal tachycardia of varying duration. Extracardiac accompaniments consist of symptoms referable to any of the other involuntary viscera, such as functional disorders of the gastro-intestinal tract or disorders of respiration, especially the inability to take a deep breath at all times (which the patient invariably describes as shortness of breath) and a characteristic sighing type of breathing. The heart may or may not be structurally normal.

The terms "effort syndrome," "neurocirculatory asthenia," "soldier's heart," "disordered action of the heart" describe essentially the same phenomena. The choice of the term "irritable heart" however, is prompted by the fact that the manifestations accompanying this symptom-complex are dependent essentially on an increase irritability and undue instability of the nervous

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system; the heart mainly becomes the effector, much in the same sense that the engine of an automobile will respond to the driver's foot on the accelerator. In short, the irritable heart is more an affection of the nervous system than of the cardiovascular system and for this reason it is necessary to consider the relation which the former bears to the latter both in health and under the conditions associated with "heart consciousness."

THE RELATIONSHIP OF THE NERVOUS SYSTEM TO THE CARDIAC APPARATUS

The origin and nature of impulses which normally influence cardiac activity.—The adaption of the activity of the heart to the activity of the body as a whole requires a mechanism which can increase or diminish that activity as required. The sympathetic nervous system is the augmenter and the vagus nerve is the inhibitor. But these nerve paths constitute merely the final routes by which the appropriate stimulus is sent to the cardiac apparatus. Innumerable influences from many sources, besides those concerned with bodily activity, may stimulate the central nuclei of these nerve paths which are situated in the medulla oblongata (vagus) and dorsal region of the spinal cord (sympathetic nerves) and alter cardiac activity. In evolution the emotions, especially fear, were of paramount importance to self preservation, so far as they served as a motivator of action; therefore, it is no wonder that the emotional reflexes have persisted as by-products of a salutary process in our present day civilization and continue to exert such profound effects on cardiac activity.

Afferent impulses from every sensory organ may cause a slowing or quickening of the heart; this also applies to afferent impulses from any of the involuntary viscera, including the heart itself. It must be recalled that ramifications of the same two nerve paths innervate both the thoracic and the abdominal viscera.

The composition of the blood is a powerful stimulant of the autonomic nervous system. It has been well established that stimulation of the sympathetic nerves causes the stimulated cells to liberate an epinephrine-like substance into the blood stream. This substance when carried elsewhere in the body may produce effects similar to those produced by sympathetic stimulation. Cannon has designated this substance "sympathin." The powerful effect of epinephrine and sympathetic stimulation on cardiac activity is well known.

When the vagus nerve [2, 3] is stimulated a substance which resembles acetylcholine is liberated. This in turn stimulates organs innervated by the parasympathetic nervous system. This substance is rapidly destroyed in the circulating blood by an enzyme (choline-esterase) which normally is present in the blood stream and tissues; this destruction however, can be prevented by physostigmine. The amount of choline-esterace present in the blood at any time therefore has been supposed to have a very definite controlling influence on cardiac activity. The pharmacologic effect of derivatives [4] of acetylcholine, moreover, has found clinical application in terminating attacks of paroxysmal tachycardia.

The subject need not be pursued any further to prove that the external environment and the normal physiologic processes mediate impulses which alter in one direction or the other the speed and the force of the heart's action. But since this subject deals principally with subjective phenomena, it is important to consider the fate of the stimuli mediated by cardiac activity itself.

The fate of impulses which result from the beating of the heart in these varying phases of activity.—The impulses mediated by cardiac contractions are conducted to the brain stem and the spinal cord by afferent fibers in the vagus and sympathetic nerves (fig 1). Within the central nervous system these impulses initiate visceral reflexes. In a general way, it may be said that

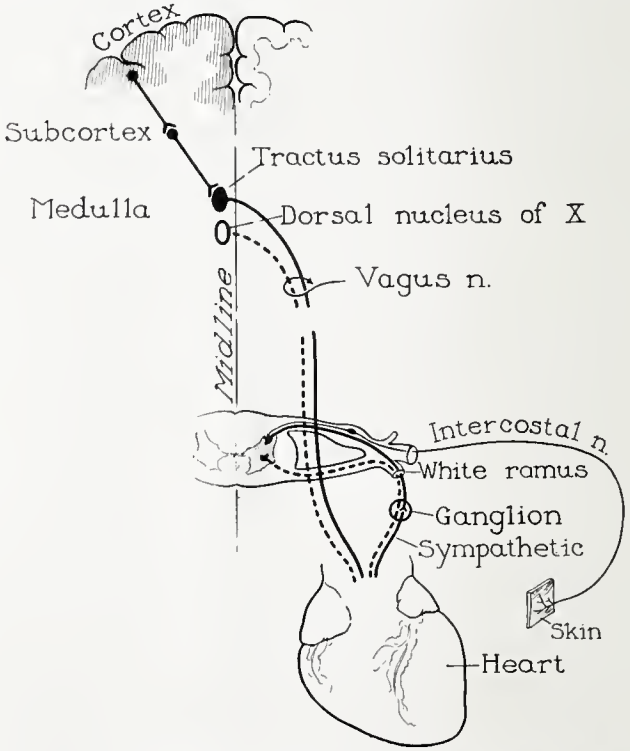

Fig. 1. Diagram showing the nervous connections of the heart. The solid lines represent the afferent fibers in the vagus and the sympathetic nerves conveying impulses from the heart to the central nervous system. Ordinarily, these impulses fail to reach the cerebral cortex. The broken lines represent the efferent fibers of the vagus and sympathetic nerves which inhibit and accelerate, respectively, cardiac activity.

the reflex arcs which are involved are situated at subcortical levels and the afferent stimuli from the heart (as well as from other involuntary viscera) fail for the most part to reach conscious levels of the brain, that is, the cerebral cortex. It is only when the impulses are unduly strong that they break through the subcortical thresholds and register as definable subjective sensations referable to the area from which the impulses originated, which in this case is the heart. This is a very important biologic phenomenon and it is salutary from the standpoint of physiologic economy, because if all the afferent impulses which are constantly flowing into the nervous system from many sources were to reach the cerebral cortex it would be tantamount to just as many telephone bells ringing simultaneously in the same office. This would result in no less than a chaotic state of confusion, in which the patient would become a helpless victim of his environment.

The physiology of heart consciousness.—Herein lies the physiologic explanation of heart consciousness or of visceral consciousness in general. Under a variety of circumstances to be discussed presently, the subcortical threshold can be reduced to a level at which an abnormal appreciation or ordinary normal activities of one or other of the involuntary organs results and even mild stimulation will produce extreme effects. The sensation which is experienced is new and unpleasant; it immediately evokes emotional responses, usually doubt, a feeling of unsafety, or frank fear. These in turn stimulate the augmenters of the heart's action and thus establish a vicious circle. Introspectiveness has now crept into the picture and the symptoms soon multiply. If this is allowed to continue the pathway to the cerebral cortex is made easier, for it is a fundamental physiologic fact that every time a nerve impulse traverses a given path it facilitates the passage of later impulses. That is, a habit is established which becomes fixed with the progress of time and the repetition of the reflex. In addition to these emotional reflexes which cause accelerated cardiac action, conditioned reflexes come into play, when initially unimportant and innocent associated events serve to set off the reflex, even after the original stimulus has perhaps long been forgotten.

The appreciation of extrasystoles plays an important part in the aggravation of the syndrome. In the majority of cases in which extrasystoles occur, the patients are unaware of their presence. The person who becomes conscious of their occurrence can be assumed to have been exposed to circumstances which have had a sensitizing effect on his nervous system. Not infrequently, a patient can name the very day on which he first noted that his heart "skipped beats," yet records may indicate that in the course of a routine examination extrasystolic arrhythmia had been noted several years prior to this time.

When paroxysmal tachycardia is an accompaniment of an irritable heart, as it frequently is, the element of fear becomes much exaggerated, especially when the manner of handling the attack is such as to contribute to the patient's suspicion that he is suffering from a serious cardiac disease. Despite the favorable outcome of numerous attacks, these individuals continue to be haunted by the fear of death.

Apart from the effect of afferent cardiac stimuli on the central nervous system itself, one cannot afford to overlook the peripheral reflex phenomena. The bombardment of the dorsal portion of the spinal cord by augmented afferent impulses creates a hypersentitivity within that area, which is in turn reflected into the corresponding spinal segments. The result is that any sensation arising in the thoracic wall, especially in the region of the heart, also becomes interpreted in an exaggerated way. Sensations which are otherwise either ignored in health or perhaps not even felt subjectively, become translated as pain. The impulse created by the stronger beat following an extrasystole is frequently described as a stabbing pain in the cardiac region. Should there be any local cause for pain, which is entirely unrelated to the cardiovascular system, such as myositis of the thoracic wall or arthritic changes in the spinal column, the patient is likely to interpret this pain as further corroboration of the heart disease which he suspects. When a patient who actually has coronary sclerosis and angina pectoris becomes hypersensitive to peripheral stimuli, it is easy to see how readily a cardiac neurosis may be superimposed on the organic disease; the disability may be out of all proportion to the coronary disease present. The patient who has mitral stenosis is notoriously liable to heart consciousness as the hypertrophied right ventricle exerts a stronger impact on the anterior thoracic wall, which leads to an unpleasant appreciation of the heart beat, especially when cardiac activity is accelerated for any reason.

It is convenient to refer here to an extracardiac accompaniment, which very frequently complicates the irritable heart. This is best described in the patient's own words, "I believe the trouble is in my stomach because whenever there is gas on my stomach it crowds my heart."

The physiologic basis of this difficulty, of course, lies in the fact that a common innervation to the heart and the abdominal viscera makes the simultaneous occurrence of gastric and cardiac symptoms very likely. It will be recalled, that the sympathetic nervous system, while it increases cardiac activity, diminishes gastric peristalsis and causes closure of the pyloric sphincter. The patient is, in other words, "stomach conscious" as well as "heart conscious," so far as he appreciates subjectively the tone of his gastric musculature. Based on the belief that the gas is the offending agent, he further adds to the difficulty by swallowing air in an attempt to belch gas.

It is worthy of reemphasis that all the subjective and objective manifestations encountered in the irritable heart syndrome will find adequate explanation in the aberration of normal physiologic phenomena. It is quite unnecessary to wander into the mystic fields of the "psyche" for such explanations.

Factors which influence the receptiveness of the central nervous system to apparent stimuli.—Inherent irritability to normal stimuli. As an inborn trait, certain persons possess (one is tempted to say possessed by it) a type of nervous system which is characterized by exaggerated responses to ordinary stimuli, regardless of whether the stimuli originate in the external environment or within the persons themselves. Constitutionally and, at times, mentally, such persons are likely to be below par. They exhibit vasomotor instability and their history often reveals inadequate adjustments to environmental crises. The factors which are necessary to initiate a state of heart consciousness in this type of individual are at times very trivial. Because of the exaggerated nervous responses of such persons, emotions register more dramatic effects on them than on their more robust neighbors.

Interestingly enough, in many of these cases drugs also provoke exaggerated effects. Not a few of these persons are voluntary abstainers from coffee and tobacco, because unpleasant nervous effects result from their use. Digitalis prescribed under the mistaken idea that organic heart disease is present, may produce gross electrocardiographic changes before any systemic effects of overdigitalization have occurred. The special importance of this lies in the fact that these effects of digitalis may mislead a thorough examiner who may not be in the position to obtain positive evidence that one of the drugs previously prescribed had been digitalis.

Conditioned irritability to normal stimuli. This conditioning can occur under a variety of circumstances: (1) Exhaustion states such as those following intercurrent illnesses, (2) chronic nervous fatigue, and (3) the known presence of some form of organic heart disease. Regarding chronic nervous fatigue it is convenient to regard the nervous reserve in exactly the same manner as one regards a bank balance, which fluctuates with the degree and the speed with which it is drained as well as with the extent to which it becomes periodically augmented. The nervously exhausted patient has overdrawn his allowance. Certain persons are wasteful in their expenditure of energy; they have no workable budget whereby they can maintain their nervous expenditure within the limits of their reserves. Early training, environmental factors and the much extolled "urge to hustle," so far as they establish habits of work and play have a good deal to do with the economy of energy.

Inevitable situations determined by social and economic factors, and the lack of smoothness of the ship's course in general, often exhaust the reserves at a far greater speed than does the day's toil. Monotony and work stimulated by compulsion rather than by interest are important factors in the squandering of energy. There also are many other related factors which need no elaboration here.

The information that organic heart disease is present is often the starting point of heart consciousness. Intimidation in order to obtain the necessary restriction in activity, vagueness in explaining the true nature of the patient's trouble, a poor choice or words in describing the type of heart disease present, or a lack of practical suggestions in the therapeutic program, form the basis of crippling anxiety states in a great many instances, even when the disease is relatively benign.

DIFFERENTIATING FEATURES OF THE INDIVIDUAL MANIFESTATIONS ASSOCIATED WTH THE IRRITABLE HEART

Palpitation.—Palpitation is a prominent symptom of the irritable heart. It is worthwhile to inquire carefully and exactly as to what the patient means by palpitation. Usually, it represents the subjective appreciation that the heart beats rapidly and forcibly. This is a simple sinus tachycardia which is provoked by exercise and especially by emotion. It is noticeable at the time a physical examination is conducted. The mere act of counting the pulse leads to rapid acceleration of cardiac activity so that the pulse rate recorded is as high as 120 to 130

beats per minute. This should not lead to any confusion because tachycardia is never in itself a sign of heart disease. The organic heart diseases associated with tachycardia will always contribute additional diagnostic signs or symptoms. Extracardiac causes of tachycardia, such as active tuberculosis or hyperthyroidism, can certainly be excluded by a correct evaluation of the clinical manifestations present and by the requisite laboratory procedures. Palpitation is the term also applied at times by the patient to attacks of paroxysmal tachycardia. The attacks start and stop abruptly and the heart rate is usually greater than 140 beats per minute. Others refer to the unpleasant sensations caused by extrasystolic arrhythmia as palpitation. Extrasystoles characteristically occur while the patient is at rest, that is, when the heart rate is slow; they usually can be abolished by speeding up the heart rate. There are two physical findings which require comment since they frequently lead to the false idea that the heart is structurally unsound. The first is a systolic bruit at the base or at the apex. It is merely an accompaniment of an accelerated circulation. It occurs also when the heart rate is increased during the course of febrile illnesses. In both instances the collateral evidence of valvular heart disease is lacking. The second finding is an apparent enlargement of the heart, depending on the diffuse apical impulse of an overactive heart, which is the result of nervous stimulation. Careful palpation, percussion, and, if necessary, roentgenologic examination will establish the fact that the heart is not hypertrophied.

Slowness of the heart beat, paradoxically enough, is not infrequently a cause of much anxiety when the patient learns in one way or another that the pulse rate is slower than the supposed normal. This condition represents nothing other than a sinus bradycardia. The fear is harbored that the heart is going to stop. More frequently, the compensatory pause after an extrasystole leads an introspective heart-conscious individual to think that he is threatened with cardiac standstill. Finally, sino-auricular block, a phenomen which probably results from excessive vagal tone, as it can be abolished by the administration of atropine, may mislead both the physician and the patient. It is manifested by a slow, irregular pulse and electrocardiography may be required to distinguish it from other types of slow arrhythmia. However, in any of the entities under discussion, when the patient has not other evidence of organic heart disease and when he has good tolerance to exercise, the physician can be sure that no serious cardiac change, such as that associated with organic disturbances in conduction, is present.

Dyspnea.—The type of dyspnea associated with the irritable heart has already been mentioned. It is mostly subjective, and provoked by nervousness rather than by effort. Even in the worst "spells of shortness of breath," none of the objective phenomena associated with deprivation of air are present. Not infrequently, the attack assumes the proportions of a nervous panic and voluntary tachypnea is so prolonged as to induce tetany or even syncope.

Pain.—The mechanism of production of pain in this condition has been considered. Careful inquiry will enable one to recognize the true nature of the pain present and to distinguish it from the true angina of organic heart disease. In some instances true anginal pain occurs during the course of an attack of paroxysmal tachycardia when the heart actually is structurally normal. The cause of the anginal pain here, as in the angina of effort, is relative myocardial ischemia. In this instance the rapidly beating left ventricle contracts before it has had time to fill; this results in a diminished minute volume output and a diminished coronary flow to a myocardium which actually requires extra blood. The prognosis is determined not by the occurrence of angina but by the paroxysmal tachycardia. The pain associated with paroxysmal tachycardia has been mistaken for the pain of coronary thrombosis.

Electrocardiographic evidence.—It would be a very comforting thought if the electrocardiogram would always indicate or exclude organic heart disease. This idea is widespread at least among the laity. Unfortunately, the electrocardiogram does nothing of the sort. More diagnostic errors result from the incorrect interpretation of the electrocardiogram than from a lack of an electrocardiogram.

Among the electrocardiographic findings in cases of irritable heart, one may mention the following deviations: conduction abnormalities, such as prolongation of P-R interval; prolongation of the QRS complex, which is usually preceded by an unusually short P-R interval, or sino-auricular block; and changes in the T wave which affect the second and third leads or even all three leads. These changes probably are dependent on vagal tone since they can all be abolished by the administration of atropine.

The confusing effects of digitalis have already been considered.

The moral to the tale lies in the truth of the statement that indications of disease practically always occur in groups rather than as an isolated sign.

Prognosis

The prognosis, as far as life is concerned, briefly may be said to be the prognosis of the accompanying disease. If there is no associated disease the life expectancy is that of a normal person of the same age. If anything, the irritable heart increases the difficulties of those who also have organic heart disease. While their fear complexes limit their activity, the anxiety which is forever present unquestionably interferes with rest, relaxation and peace of mind to the extent that it actually may affect the prognosis adversely. The removal of a superimposed functional load therefore is of prime importance in the treatment of organic heart disease.

As a group, patients who have irritable hearts are no more susceptible to disease in general than is the average run of the population in the locality. The prognosis as far as the abolition of symptoms and ultimate recovery are concerned depends on the efficiency of management, the degree to which habit reflexes have become fixed in the central nervous system, the practicability of repairing situational and environmental maladjustments and upon biologic factors inherent in the composition of the blood, over which, in the present state of our knowledge, we have but limited control.

These general remarks apply also to those cases in which such accompaniments as paroxysmal tachycardia and extrasystolic arrhythmia are prominent features.

Treatment

The first step consists of a diagnostic assessment of the various factors present in the individual case. Thus, one should determine exactly what symptoms are the result of organic heart disease, if this is present at all. This presupposes a knowledge of the mechanism and physiology of heart failure and coronary insufficiency. The survey must be thorough and extensive enough to convince the patient that the physician is convinced of the facts which he is telling the patient. One should determine what symptoms are neurogenic manifestations and what conditioning factors are present in the individual case. This requires patience and tactful inquiry. It is essential to listen to everything the patient wants to tell about himself, for each of the symptoms which has been troublesome must be considered. It is wise not to storm the patient with questions relative to his personal and intimate life unless he stubbornly avoids the issue. Frequently, when the mechanism of his symptoms are explained to him and when he is told in general terms how diferent factors play a part in the production and the aggravation of his symptoms, the patient will volunteer the very information which one requires. In fact, in many cases in which patients are intelligent, the generalities alone serve the purpose.

The second step consists of a frank discussion of the whole case, that is, telling the patient the entire truth. One's language should be such that the patient will understand what is meant and the descriptive terms should not be misleading. Thus, in talking to patients who have organic heart disease, such words as "angina pectoris," "myocarditis" and the details of valvular lesions often are best avoided. But if one points out how anginal pain or dyspnea on effort are purposeful and valuable as guides in determining the amount of exercise which can be indulged in with safety, one not only tells the truth but enables the patient to use his own judgment. The physician then can trust the judgment of the patient and secure his cooperation. To warn a patient "to be careful," without offering specific advice regarding specific activities, is poor advice because it engenders nothing but fear and does not offer any help. It places the physician in the self-protecting attitude of "I told you so," if things should go wrong with the patient, without having offered anything in return to protect the patient. These are often sparks that set off the train of events which lead to the development of an anxiety neurosis. There is no reason why this should not be prevented. Whether or not organic heart disease is present, when one recognizes the characteristic features of the irritable heart one must be equally emphatic in expressing the facts. It is futile to tell the patient that there is nothing wrong when no organic disease can be elicited; this is also untrue. Since the cerebral cortex has no direct control over the function of organs it is useless to demand that the patient behave differently. He will however behave and feel differently when the mechanism of his symptoms are made clear to him and when the causes of his worry are removed.

It is not wise to stress the part which the nervous system plays in the production of symptoms at the outset, since this often leads to resentment and the misunderstanding on the part of the patient that his symptoms are considered imaginary. One must remember that the nervous systems of these patients respond in an exagger-

ated fashion; such persons are, colloquially speaking, "touchy" individuals. If, however, the patient is told that the function of any organ may be disturbed in numerous ways, without that organ actually being the seat of disease, and that this disturbance of function may cause real symptoms, which at times may be extremely unpleasant, he will immediately be more receptive to accepting the subsequent facts. Depending on the type of patient, it may be further necessary to exemplify this statement by quoting certain functional phenomena with which the patient is likely to be familiar, such as the occurrence of diarrhea following a dramatic nervous upset or the occurrence of vomiting at the sight of blood in cases in which neither the bowel nor the stomach is actually diseased. In short, one should try to convince the patient of the reality of functional symptoms in general without straining either his confidence or his credulity. Having achieved this, the next step is to convince the patient of the harmlessness of these functional phenomena in general and the harmlessness of the individual symptoms in particular, and to indicate how conditioning factors operative in the particular case contribute to the magnitude of these functional manifestations. Practical suggestions in the assumption of a new philosophy and a new working and living program will be accepted with less reluctance when the patient has been "prepared" in this manner. Where the occasion for worry can be removed, success in treatment is practically assured. It is apparent, however, that inextricable situations militate against such success. The physician cannot be expected to shoot a drunken husband even if it will solve the difficulty, nor can he overcome the grief occasioned by the loss of a parent, but it is essential that the patient should be told how these factors are related to his symptoms. It is also advisable to explain that, so far as fatigue factors provoke many functional symptoms, the very symptoms which the patient is bitterly complaining about and which he is antagonistic to, are actually salutary so far as they represent nature's crude method of curbing certain undesirable habits. As a corollary it may be suggested that these symptoms could be used with advantage as an indicator or barometer of one's general state of health. In cases in which the accompaniments are present they must be handled in a similar manner. Nothing must be left unexplained since the unknown and the uncertain factors always occasion anxiety. It is a comforting thought to the patient who has extrasystoles to know that there actually is a small heart beat, which he is unable to feel, during the compensatory pause which has perhaps led him to fear a stoppage of his heart. He should particularly be discouraged from counting or feeling the pulse, or conducting any other form of self examination. Above all, the harmlessness of the condition must be stressed.

There is no question that when conditioning factors are successfully controlled, attacks of paroxysmal tachycardia diminish noticeably in frequency, to such an extent, in fact, that it is only in the more persistent cases, that quinidine therapy is actually imperative. Physicians cannot afford to overlook the fact that when they prescribe a drug which directly affects cardiac function, such as quinidine does they are removing one of the psychologic props on which they have been building up reassurance. When attacks however, are frequent or prolonged, it would be wrong to withhold such a valuable drug. The use of acetylcholine is, on theoretical grounds, the drug of choice and considerable success has been claimed from its use. The judicious use of mild sedatives, along with strong reassurance, will however control the symptoms in a high percentage of cases. With the prescription of such medication, however, it is of utmost importance to explain that the medicine is a sedative and that it has no direct action on the heart itself.

Summary

The irritable heart is a clinical entity. It should be recognized by its component symptoms and signs, not by exclusion, since it may actually be, and often is, an accompaniment of organic heart disease. While it requires much time, patience, tact and repeated encouragement, it is amenable to the correct management.

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BACILLARY DYSENTERY IN 1937, FLEXNER IN TYPE

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The outbreak of 1937 is a repetition of instances with regard to bacillary dysentery which has been carefully studied clinically and in laboratories since 1932 and follows through the caustive organisms which Shiga in 1898, in Japan, and Flexner, in 1899, in the Phillipines, described. Previous to the year 1937 the greater percentage was in favor of Shiga, while in 1937 no Shiga was cultured and the greater percent of positive cultures were Flexner in type.

The territory west of the Mississippi County, Arkansas, line is practically free of dysentery. In adjoining states, Texas, Tennessee and Mississippi, there was very little reported. In southeast Missouri, at a point above Caruthersville, and extending south through Mississippi County, Arkansas, about May 15th, acute Flexner dysentery began, increasing rapidly and becoming more acute in the month of June and less severe, with a decrease in cases, in the latter part of July. In this section dysentery seems not to be milk-borne or water-borne and is usually endemic and periodic outbreaks occur without any apparent laxity in sanitary regulations. However, in this particular area sanitary regulations are bad. In most towns the cesspool is like a honeycomb, with the outlying territory depending on privies with the water supply coming from the barn-lot pitcher-pump, and the source of green vegetables is usually from the manure fertilized garden.

EPIDEMIOLOGY

In the latter weeks of May in this territory, the children began to complain of bowel upsets and each member of the family had more or less infection that was previously all over the territory. At the same time in the towns of southeast Missouri the same condition was occurring. It was evident that the entire outbreak was a contact infection and further investigation revealed the fact that the greater portion of them, on culture, were Flexner in type. It appeared quite certain that sporadic cases kept the disease going due to many of the milder cases, recognized and unrecognized, which were up walking around.

SYMPTOMATOLGY

Mild Type

In the typical case of the mild type, the incubation period was short, often only a few hours, with no prodomal symptoms other than anorexia, or slight lassitude. The onset was generally quite sudden, with colic, at times constipation, or with a few watery greenish stools appearing in six to twenty-four hours. Occasionally, there was one stool of blood, or bloody mucus, and vomiting which was usually ascribed to food poisoning. There was little or no temperature. The patient looked well and some of the adults did not discontinue their work. Others went to bed and were usually over the upset in three or four days. The dysentery discontinued on simple therapy.

Severe Type

These cases were taken suddenly ill with general aching pains, very high temperature ranging from 103 to 105 degrees, more or less severe toxemia and prostration, headaches, and, in a few instances, convulsions, excruciating pain in the abdomen, later nausea and vomiting, and, in twelve to twenty-four hours from the onset, bloody mucus stools, ten to twenty in number. After the onset of the dysentery, the temperature usually dropped to around 100 degrees, the pain in the abdomen become less severe, and the abdomen only slightly tender. The toxemia improved following hypodermoclysis and phleboclysis and the forcing of fluids by mouth.

NEUROTROPIC TYPE

Unusual Type

These cases show labial herpes and herpes zoster with severe headaches, violent emesis, convulsions, drowsiness, or stupor, with ten to twenty stools per day. These were not infrequently accompanied by rigidity and soreness of the neck, but slightly positive Kernig and Brudzinski. These patients fall in somewhat of a separate group and, while herpes is considered to be a virus infection, it was evident that after the dysentery improved meningeal symptoms with the herpes disappeared, all of them had more or less upper respiratory infection. It is, therefore, believed, that the Flexner type of dysentery is associated with some neurotropic strain and this is more convincing when consideration is paid to these cases previous to 1937, which was Shiga in type and did not show any of the neurotropic type.

APPENDICULAR TYPE

In two neighboring families, after the acute onset of the colic dysentery, the patients presented acute tenderness in the right lower quadrant and surgical intervention disclosed acute beginning gangrenous appendicitis. These cases were operated on within the first twenty-four hours after the onset and usually followed the course of the severe type but showed a normal leukocyte count and even leukopenia.

LABORATORY

Serology and Blood Specimen

Agglutination shows a generally high titre to most of the antigen used, but specifically against bacillary dysentery infection. Two cases of separate individuals are of particular interest, as one gave no history of dysentery but had extensive skin lesion on the hands, while the latter had two attacks of dysentery about three weeks apart. The antibody against Flexner dysentery does not remain in high titre in the blood stream for long. Normally, one would not find a titre of more than 1 to 40 without a history of fairly recent attacks. In both of these cases the titre was 1 to 320. Blood examination showed red blood cell count from 5,000 to 7,000. Differential polymorphonucleus were from 54% to 92%; lymphocytes from 8% to 60%. Most of the low counts were seen in the acute appendicular types.

BACTERIOLOGICAL EXAMINATION OF STOOL SPECIMEN

Cultures were taken direct from intestinal ulcers by means of proctoscope and swab. Of these specimens, 39 in all, there was a pure culture of bacillary dysentery infection in about 80%.

CONCLUSION

From these findings, clinical and laboratory, it is concluded that the dysentery was caused in 1937 from the Flexner dysentery group. Other intestinal organism or some virus type complicated the outbreak, but no typhoid or Shiga organisms were found even through enrichment media and methods were used which ordinarily reveal the other type of dysentery organism.

TREATMENT

Mild, Moderate and Severe

All patients, when first seen, were given intravenously, according to weight sodium sulfocyonate (Abbott's), one cubic centimeter per five pounds, body weight, not exceeding twenty cubic centimeters, repeated once or twice at twenty-four hour intervals, if required. This precaution was taken before laboratory work and with a general diagnosis of dysentery, since it was proven in 1932 to 1936 that this drug acted somewhat like a specific in Shiga types of dysentery if given in the first twenty four hours. Time was lost in waiting for cultures and there seems to be a definite improvement in all dysenteries due to a temporary decrease in water loss and decrease in the number of stools, with a decrease in the toxicity. In the Shiga type, it was found that the drug acted as a preventitive also if given intravenously or by mouth.

In the mild and moderate cases, the patients were immediately put in absolue rest; fluids were forced; hot wet towels and compresses were used on the abdomen for relief of pain of the colic; paregoric, or tincture opii, was given in small doses every sixth stool. The diet consisted of fruit juices, cereals, strained soups, jello, cottage cheese and scraped apple with no sugar. Water and sweetened Ringer's solution were forced. In the infants of these classes, the same routine was carried out with the addition to the diet of Mead-Johnson Dextri-Maltose Product No. 94 modified by Dr. C. A. Tompkins to (Dextri-Maltose 73.5%, Pectin 19.9% and Agar 6.6%), used to replace the ordinary Dextri-Maltose and instead of 6 level tablespoonsful of Dextri-Maltose in the milk-water solution, 10 to 12 tablespoonsful of the No. 94 product was used. Concentrated vitamins and the intermuscular injection of from one-half to three cubic centimeters of concentrated liver extract (Lilly), were used. It was found that the liver extract held up the red blood count, seemer to improve the appetite and apparently decreased the toxema.

THE SEVERE CASES

The temperature was reduced usually by empirin and ice bags with immediate high soda water enema or tea enema. Then, in adults, glucose, 5% and 10%, in normal saline was given intravenously. In children and toxic adults, 5% glucose in Ringer's or Hartman's solution was given to combat the definite loss of minerals. This was given repeatedly in the homes instead of using the continuous method. In all cases Ringer's Solution, sweetened or unsweetened, was pushed by mouth. The enema was continued as a tea enema once a day if a bloody dysentery continued. With the routine diet and fluids these patients were required to remain in bed until all symptoms had entirely disappeared and cultures were negative.

THE MILD CASES

Not all of these cases show dysentery or diarrhea, some were even constipated and without symptoms referable to the abdomen, but had positive blood titre and stool culture and were put under the same treatment.

COMPLICATIONS

The greater percentage of the cases of the Flexner type had associated acute upper respiratory infection. The appendicular type in four instances went to operation. The acute diffuse mesenteric and mesocolic lymphadenitis, and acute distal ileitis with chronic ulcerative colitis usually followed in all severe cases and prolonged the convalescence. In one instance, there was a definite arthritis in both feet which developed toward the end of the dysentery, with a high sedimentation rate returning to normal sixty days after all the dysentery symptoms had disappeared.

CONCLUSION

First. Acute bacillary dysentery is prevalent in northeast Arkansas and southeast Missouri, occurs yearly beginning in May, is most severe in June, and recedes in July with a secondary recurrence in September and October. The most severe type has been Shiga with a death rate ranging from 35.3% to 40%. These are from private practice and there is no way to determine the total number of cases in the territory or the relation of total number of deaths to the total number of cases. Flexner type has been present but no determination as to its death rate could be determined prior to 1937.

Second. The man-hour time lost due to this infection in the months of May, June and July cannot be determined exactly but is of such extent that it would be most alarming as well as crippling to production in any industry.

Third. The total death rate and complications which result in a chronic infested gastro-intestinal tract has been very expensive and the total death rate is the highest of all other types in this territory. For a period of six years there has been an average of one death in eight cases, as recorded by the Bureau of Vital Statistics for Mississippi County, Arkansas.

Year	Total Deaths	Typhoid	Dys-entery	T. B.	Mararia	Diph-theria	Heart Trouble
1932	752	16	94	52	34	12	No report
1933	875	15	92	56	79	7	No report
1934	840	10	101	41	49	11	No report
1935	589	8	42	45	37	2	No report
1936	586	4	71			...	63
1937	371		41	17		....	55

The above table does not show those cases which were carried from Mississippi County, Arkansas, to Shelby County, Tennessee, for hospitalization. There is usually a high death rate among these patients due to the severe condition of the patient at the time the decision is made to hospitalize them, but this death rate rightfully belongs to Mississippi County, Arkansas.

In 1932 there was an early infancy death rate of 43 and in 1933 an early infancy death rate of 26. These are usually intestinal in origin but cannot be classified. This report is not given for the other years.

In the year 1936 pneumonia was first with 111, dysentery second with 71 and heart trouble third with 63 deaths. In 1937, from January 1st to July 1st, pneumonia was first with 60, heart diseases second with 55, dysentery third with 41 deaths.

Fourth. The mild consideration with bacillary dysentery is regarded both by the general public and the health unit, as only a bowel complaint due to green vegetables or spoiled foods, and the fact that some are constipated but are the source of infection for the rest of the members of the family, or other individuals, is the main cause of the epidemic that recurs each year.

Fifth. At no time on examination has milk, food or water been found the direct source of infection in this territory. The infection is spread evidently through direct contact, and in two instances it has been shown that commode seats were the course of infection, particularly in children. It is believed that the constipated cases and ambulatory cases are the types which spread the infection through means of contact.

Sixth. Bacillary dysentery usually infects each member of the family, either in mild or severe manner, and in the Shiga type usually takes a toll of the first two patients, particularly the young or elder members.

Seventh. While no specific claim was made for sodium sulfocyonate in bacillary dysentery through work done over the period from 1932 to July 1, 1937, the drug has been used with a definite detoxicifying effect, water loss and stools decreased without reaction or contra-indication to the drug either in infants or adults.

Eight. Only through education as to the cause, the method of contact and conjugal infection, will we ever be able to control the large number of cases that occur each year and to reduce the present high death rate.

INFECTIONS OF THE HAND*

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Morrilton

In order to understand the importance of infections of the hand and to be able to properly treat these conditions it is necessary to have a thorough knowledge of its anatomy. The hand extends from the wrist joint to the tips of the fingers and is composed of a palm, a thumb and four fingers. The wrist joint, which is closely associated with the hand, and which is often concerned in infections of the hand will be discussed briefly at this point.

The wrist is a mobile, flexible link interposed between the forearm and hand. It includes the soft part, bones and joints over an area embracing the carpus and the bony extremities of the radius and ulna and the bases of the metacarpals. It is readily understood that this area is composed of numerous joints, ligaments and tendons. The transverse carpal, or anterior annular, ligament is a tough, fibrous, band stretched across the arch formed by the carpal bones making a canal for the conveyance of the flexor tendons and the median nerve from the anterior compartment of the forearm to the central compartment of the palm. The transverse carpal ligament is attached on the radial side to the tubercule of the scaphoid and the ridge of the trapezium and on the ulnar side to the ulnar eminence which is formed by the pisiform and the hook of the unciform. The dorsal carpal, or posterior annular, ligament is a thick fibrous band derived from the deep fascia of the forearm and is attached laterally to the lateral margin of the lower extremity of the radius and its styloid process, and mesially, to the styloid process of the ulna and the ulna border of the carpus. Septa pass from the deep surface of this ligament to ridges on the radius and ulna forming tunnels for the extensor tendons of the forearm. The movements of the wrist joint are extension, flexion, adduction, circumduction and gliding.

The hand has two functions to perform, (1), as a feeler, or protective organ and, (2), to grasp or hold objects. Because of the highly developed nerve endings in the skin of the hand it is a very sensitive organ. The prehensile function is dependent upon the fact that the hand is capable of modifying its shape and strength to suit the conformity and the consistency of the object grasped. The hand may be likened to a forceps, the thumb forming one blade, and the fingers, individually or collectively, forming the other blade. The hand, directed by the will and guided by the eye, can perform a great variety of delicate and complicated movements through the coordinated action of its extrinsic and intrinsic muscles. These movements are made possible by the numerous joints.

The palmar aponeurosis consists of a strong central portion and two lateral portions. The longitudinal fibers are derived from the tendon of the palmaris longus muscle. Proximally the aponeurosis blends with the transverse carpal ligament and distally it widens out and divides into four slips which blend with the fibrous digital sheath and lateral ligaments of the metacarpophlangeal joints which are inserted into the sides of the bases of the proximal phlanges. Fibrous septa pass backward from the radial and ulnar margins to wall off the muscles. The aponeurosis is also closely identified with the overlying skin by fibrous septa which pass between them.

The intricate movements and functions of the hand depend upon the numerous joints, ligaments and tendons. These structures depend upon a smooth surface in performing their individual functions. It can be readily seen that any injury or disease that interferes with the smooth surfaces of these organs would materially interfere with the function of the hand. These structures are also prone to respond to irritation and inflammation by forming adhesions of fibro-connective tissue. The aponeurosis of the palm, the anterior and posterior annular ligaments with their corresponding septa, and the sheaths of the fingers, tend to form different compartments, which confine and allow infections to travel upward and downward. The surgeon, therefore, in dealing with infections of the hand, is confronted with the proposition of an early diagnosis, elimination of the infection, and restoration of the function.

Because of its functions, the hand is subjected to much trauma which predisposes to infection by providing a portal of entrance for organisms. The common organisms causing infection of the hand are the staphylococcus, streptococcus, and many others.

Infection of the hand, whether it be of the fingers, thumb or palm is usually localized because of the septa which tend to prevent diffusion. It may spread, however, following tendons from one compartment to another. An infection of the hand usually localizes as an abscess over one of the phalanges of the fin-

*Read before the Conway County Medical Society, Morrilton, May 20, 1937.

gers or thumb or in the palm beneath the palmar fascia. The infection termed a felon begins in the skin of the palmar surface of the distal phalanx and rapidly involves the underlying soft tissues. The connective tissue framework is so dense as to form an anterior closed space comprising the distal phalanx. When pus develops is this closed space, it has no means of escape as in other connective tissue spaces and the pressure cuts off the blood supply, causing bone necrosis. An abscess or infection of the middle or proximal phalanx follows the same general course as that of a felon except that the pus has a better chance of escaping upward along the tendon and there is not as much danger of bone necrosis. An abscess of the palm may occupy the thenar, hypothenar or central areas. Because of their superficial location, the thenar and hypothenar regions are more frequently infected by punctures than are the deeper fascial spaces. A collar button abscess is often found at the distal edge of the palm. This type of abscess is formed by pus in the subdermal tissue passing through the dermis where a second division of the abscess forms, producing a collar button-shaped accumulation of pus.

The diagnosis of an abscess of the hand is made from the cardinal symptoms of inflammation: redness, swelling, severe local pain, throbbing and fluctuation. Fluctuation is not as dependable were as in other regions because it cannot be very satisfactorily obtained early.

Complications from infection of the hand are contractures, impaired or lost function and extension of the infection underneath the anterior annular ligament to the forearm.

The treatment of infection of the hand resolves itself into drainage and restoration of function. In securing drainage of a felon, the phalanx is freely incised along the side and not in the median line. This is to prevent impairment of the tactile sensation. The same general principle of incision applies to the other phalanges. An abscess of the middle palmar area should be drained through an incision beginning a thumb's breadth above and on a line between the small and middle fingers, extending upward for a distance of about one inch. The incision placed at this point is less likely to do damage to the important structures of the hand. Infection of the thenar area is drained by a dorsal incision placed between the base of the thumb and index finger. Infections of the tendons are drained by an incision placed over the involved tendon and extending down through the tendon sheath.

Severe infections of the hand should receive treatment directed to the restoration of function as soon as the acute inflammation has subsided. During the acute stage it is well to place the arm and hand on a splint with the arm in extension and the fingers and thumb in a functional position, or slightly flexed. As soon as the acute stage has passed, massage, passive and active movement, and the application of heat should be begun.

RESOLUTION

Whereas, Dr. C. H. Slusser, a most esteemed member of the Carroll County Medical Society, has, on April 1st, past, been removed from among us by death;

Therefore be it Resolved, That in his passing, Carroll County Medical Society has sustained a great loss. We mourn his going for the reason that he was a true disciple of organized medicine, and at all times lived within its best teachings,

Be it further Resolved, That a copy of this resolution be spread upon the minutes of the Carroll County Medical Society, that a copy of same be sent to the Secretary of Arkansas Medical Society, and that a copy be furnished to the wife of Dr. Slusser.

Respectfully submitted,

J. F. John, Pres.

D. K. McCurry, Secy.

AMERICAN MEDICAL ASSOCIATION RADIO PROGRAM FOR MAY

May 4th. Healthier Mothers. General advice for the expectant mother; good for boys and girls to know about.

May 11th. Hospitals Aid Health. The place of the hospital in the health program of the individual and the community.

May 18th. Runabouts, 1938 Model. The preschool child and the health and personality problems of that age.

May 25th. The Health Check-up. Periodic health examination and what follows, and why.

June 1st. Vacation Plays and Misplays. Making the vacation a real contribution to health and recreation.

INTUSSUSCEPTION: CASE REPORT*

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Batesville

The rarity of intussusception in adults due to benign tumors creates interest among surgeons from a standpoint of differential diagnosis and surgical technique. The author wishes to present the following case, with the results of diagnostic error, in order that it may be recorded in the literature and for the generous warning the diagnostic error carries.

Christopher presented two cases in the November, 1936, issue of Surgery, Gynecology and Obstetrics, together with a brief review of the literature. With his kind permission, we borrow from that review for a summary of the pertinent data.

In a classical analysis of 300 cases, Eliot and Corscaden recognized the infrequency of intussusception in adults. One-third of these cases were due to tumor. Of these tumors, 60% were benign, 40% malignant. The benign tumors generally had a constricted, pedunculated base and most often originated in the inner layers of the intestinal wall. Polyps were the most common, although lipoma, myofibroma, myxoma, papilloma and cyst of the ileo-cecal valve were found. Since their paper, 43 cases of intussusception due to benign tumors have been reported. In the same interval, 16 cases due to malignant tumors have been reported.

Christopher states: "Most of the cases of intussusception in adults are characterized by the symptoms of acute intestinal obstruction although there have been cases with previous attacks of obstruction which subsided without operation, cases characterized by more or less chronic pain and vomiting, and cases which have simulated cholecystitis and peptic ulcer."

Case report: Mrs. D. D., age 46. Complaining of pain in the abdomen with bloating and vomiting. On April 3, 1936 she had a "billious attack" with pain in the abdomen, belching, nausea and vomiting. The abdomen was so distressed that hot stupes were used for relief. The pains constantly centered about the umbilicus and were sufficiently severe that several hypodermic injections of morphia were required for their relief. Large quantities of purgatives were used with little or no results. Enemas were likewise unsuccessful. The vomitus was not fecal in odor or taste. There were no tarry or clay-colored stools. There had been no mucus or blood in the stools. No masses had ever been felt in the abdomen. There had been a weight loss of ten pounds within the past year. The patient had been constipated all her life but this had become more obstinate during the past few months, especially within the past few weeks. About six months ago she noticed a bloating of the abdomen which would subside with each bowel movement. With this there were attacks of pain of a colicky nature about the umbilicus, none severe. Nineteen years ago the patient had pellagra and each summer since there have been some symptoms suggestive of recurrence. Menstrual history was irregular. She has had seven children. The family history is irrelevant except that her father had died of carcinoma of the stomach.

FIGURE 1

Physical examination showed a small, thin, dehydrated white woman in apparent abdominal pain. The abdomen was distended in moderate degree with marks of a hot water bottle burn at the umbilicus. There were no palpable masses. Slight pain was produced on pressure over the bladder. There was no rebound tenderness. The liver and spleen were not palpable. Vaginal examination showed a large outlet, poor perineal body and an enlarged, infected, eroded cervix, the uterus retroflexed with slight pain on movement. No palpable tumor

*Read before the Randolph-Lawrence County Medical Society October 13, 1936 and before the Independence County Medical Society January 4, 1937.

masses in the pelvis. Roentgenogram (flat film of the abdomen) showed "step-ladder" formation of bowel with gaseous distention, especially to the left, in the small intestine. Blood study showed 4,230,000 red cells, 15,000 white cells with a hemoglobin of 90%. The temperature was 98.6° F. The urine showed a moderate number of pus cells in the catheterized specimen.

Impression:

1. Acute exacerbation of a chronic partial intestinal obstruction with severe dehydration.
   a. Internal hernia.
   b. Malignant tumor of the bowel (?).
2. Pellagra.

Placed in bed, the general condition of the patient improved under a regime of nothing by mouth with large quantities of saline intravenously and subcutaneously, up to 4500 cc. in 24 hours. With no sedatives other than a little amytal, the patient quieted down and was able to retain small amounts of water. The following day she had one attack of pain about the umbilicus with nausea and vomiting. The vomitus was bile-stained. Shortly after this attack operation was performed. Under ether anesthesia, a right rectus incision was made near the umbilicus. In the right lower quadrant a mass about 8 inches long was found, gently delivered into the incision, and shown to be an intussusception of the ileum, about 30 inches proximal to the ileo-cecal junction. The intussusception was reduced by pushing the inner segment out with the thumb on the outer segment. No difficulty was experienced in reduction. When hot saline packs were applied, the color, tone and motility of the intestine rapidly became normal. A hard fecal mass was pushed several (?) inches, it was thought, distal to the site of the intussusception. The entire colon and the appendix were normal to inspection and palpation. The gallbladder was firm but not tense, thick-walled, with surrounding adhesions. No further surgery was deemed advisable due to the general debility and dehydration of the patient and the abdomen was closed routinely.

The post-operative course, peritonitis regime, was nothing by mouth, saline and glucose intravenously to 3000 cc. daily, pituiturin 1 cc. every four hours; these measures carried out for four days. The patient then gradually received increased amounts of water, then a diet. The hospitalization remained uneventful except that on the ninth day she had an attack of pain about the umbilicus with vomiting; quickly relieved by atropine. She returned to her home on the fourteenth postoperative day, weak, but having gained in weight from 80 to 91 pounds.

She remained at home from May 3rd to May 21st and then returned with complaint of nausea, occasional vomiting and constipation and a severe stomatitis of several weeks duration. The tongue was strawberry-red and there were several deep fissures and ulcers at the base. Two days later she developed a severe diarrhea. Her feet and hands were deeply "sunburned," possibly (?) because she had been working outdoors without gloves or shoes, perhaps because of a return of her seasonal pellagra. She was placed on brewer's yeast, dilute hydrochloric acid, and nux vomica, with mineral oil and small doses of atropine. Under this she remained fairly comfortable and gained in weight although she remained weak. On June 12 and 14th she had severe colicky pains in the abdomen with occasional vomiting. These were easily relieved with atropine and were of short duration. On June 15th she had a severe attack of pain lasting several hours. Permission to operate was obtained with difficulty, but at midnight, the seriousness of the situation became apparent, and permission was granted. In the interval she had a small bowel movement with traces of blood. The pre-operative diagnosis was another intussusception with the impression that it was due to a tumor not discovered on the previous laparotomy. Operation revealed an intussusception at the same site and an intrinsically placed, pedunculated tumor, 6 cm. long by 3 cm. at its widest diameter, was found (Fig. 1). Two inches of intestine on each side of the tumor was not responsive to hot saline packs and an eight-inch resection including the tumor site was performed, with end-to-end anastamosis. Under spinal anesthesia the procedure required one hour and twenty-five minutes. About three hours postoperative, the blood pressure began to fall and did not again rise. The patient remained in constant shock despite stimulants, pituiturin and suction with a nasal Levine tube. Early the next morning the patient expired. A limited necropsy showed the anastamosis to be in good condition.

The pathological report on the tumor from Johns Hopkins Laboratory was benign polyp.

Summary: A case of intussusception of the ileum in an adult due to benign polyp is presented for the academic interest with the warning to general surgeons of the error in diagnosis at the time of first operation.

Note: I wish to take this opportunity to thank Dr. Frederick Christopher for his kind personal communication and interest in the case.

THE JOURNAL
OF THE
ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under direction of the Council

W. R. BROOKSHER, M. D., Editor
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EDITORIAL

THE TEXARKANA SESSION

Over three hundred members registered at Texarkana April 18-20th for the Sixty-third Annual Session of the Arkansas Medical Society. A most instructive scientific program provided discussions of the advances of scientific medicine. Attendance at general sessions was proportionally higher than usual, indicating much interest among those present. The out-of-state speakers were: J. H. J. Upham, President, American Medical Association, Columbus, Ohio; J. Shelton Horsley, Richmond; M. Herbert Barker, Chicago; W. R. Buffington, New Orleans; Charles R. Gowen, Shreveport; Alexis Hartman, Saint Louis; D. H. O'Donoghue, Oklahoma City; C. B. Erickson, Shreveport; N. L. Miller, Oklahoma City; Fred Taussig, Saint Louis; and Roland Klemme, Saint Louis. The public session was exceptionally well received by the citizens of Arkansas. Social features included an open house Monday evening and a banquet Tuesday evening, both functions arranged to permit the greatest degree of good fellowship. Much credit is due the Miller County Medical Society for the perfection of detail which characterized the organization of the session and all praise is due the hard-working committees and individual members who labored for the entertainment of the Society. The following officers were elected: President-elect, A. S. Buchanan, Prescott; First Vice-president, R. R. Kirkpatrick, Texarkana; Second Vice-president, C. G. Hinkle, Batesville; Third Vice-President, S. W. Douglas, Eudora; Treasurer, R. J. Calcote, Little Rock; Secretary, W. R. Brooksher, Fort Smith; Councilors, Second District, M. C. Hawkins, Jr., Searcy; Fourth District, H. T. Smith, McGehee; Eighth District, Don Smith; Sixth District, Val Parmley; Tenth District, Clyde McNeil, Rogers; Delegate to the American Medical Association, E. E. Barlow, Dermott, and Alternate, O. J. T. Johnston, Batesville. S. J. Wolfermann, Fort Smith, was installed as President for 1938-39. The Council reorganized, electing Val Parmley, Chairman, and D. L. Owens, Secretary. Hot Springs National Park was selected for the 1939 session.

THE JOURNAL

Published as the official organ of the Arkansas Medical Society, The Journal of the Arkansas Medical Society does not just happen. During the year it contains the scientific addresses pre-

sented to the annual meeting together with an increasing number of papers prepared by members and presented before county societies. The section on society proceedings is growing in a gratifying manner because a number of county society secretaries are willing to send in reports of their meetings. These are desired. Also desired are items of general interest regarding individual members, only available to The Journal if some one takes the trouble to clip a press notice or write a short note giving the information. The Journal believes the activities of Arkansas physicians are of general interest to its readers and hopes for greater cooperation in increasing the sum total of personal items.

Your Journal is made possible of publication by the whole-hearted advertising support of the firms whose messages appear in the advertising pages. If it were not for this support, it would become necessary to increase the annual assessments to provide for its publication, or to suspend operation. A proper spirit of appreciation for this assistance which The Journal receives from commercial firms requires but a bit of reciprocity upon your part as a member of the Arkansas Medical Society.

RESOLUTION

Whereas, Dr. Henry Pace, a most esteemed member of the Carroll County Medical Society, has, on March 13 past, been removed from among us by death;

Therefore be it Resolved, That in his passing Carroll County Medical Society has sustained a great loss. We mourn his passing for the reason that he was a true disciple of organized medicine and at all times lived within its best teachings,

And be it further Resolved, That a copy of this resolution be spread on the minutes of the Carroll County Medical Society, that a copy of same be sent to the secretary of Arkansas Medical Society, and that a copy be furnished to the wife and children of Dr. Pace.

Respectfully submitted,

J. F. John, Pres.

D. K. McCurry, Secy.

He (the physician) may have "buried some mistakes" but he probably helped to bring a lot of others in the world.—Salt Lake Tribune.

PROCEEDINGS OF SOCIETIES

The Tri-County Medical Society met at Hope April 1st for the following program: "Doctor's Insurance," E. M. Sharp, Prescott; "Hoarseness," John S. Agar, Little Rock, and "Management of Congestive Heart Disease," R. E. McLochlin, Little Rock.

J. W. BRANCH, Secretary.

The Pulaski County Medical Society was addressed April 4th by S. F. Hoge, "Poliomyelitis."

E. H. WHITE, Secretary.

The Pope-Yell County Medical Society met in dinner session at St. Mary's Hospital, Russellville, March 17th for a program on the prevention and treatment of syphilis. Speakers were W. P. Scarlett, Morrilton, and Miss Lila Russell, Clarksville.

The Southeast Arkansas Medical Society met in dinner session at Monticello March 21st for the following program: "Late Toxemias of Pregnancy," Clyde D. Rodgers, Little Rock, and "Malnutrition in Infants," Chas. Wallis, Little Rock.

H. T. Smith, Secretary.

Mississippi County Medical Society met April 5th for the following program: "Differential Treatment of Coronary Thrombosis and Angina Pectoris," Lyle Motley, and "The Use of Living Transplants in Certain Types of Hernias," J. L. McGehee, both speakers of Memphis.

F. D. Smith, Secretary.

The Benton County Medical Society met in dinner session at Rogers April 14th for the following program: "Diabetic Coma," W. A. Moore; "Leukemia," Guy Hodges, and "Thrombotic Pneumonia," Clyde McNeil.

Geo. M. Love, Secretary.

The Cross County Medical Society devoted its April 5th meeting to discussions of the treatment and control of venereal disease and on the relation between the state department of health and private physicians.

The Third Councilor District Medical Society met at Hazen April 7th for the following program: Address of Welcome, J. G. Wilson, Gillett; Response, S. A. Drennen, Stuttgart; "Coronary Artery Disease," Daniel H. Autry, Little Rock; "Practical Aspects of Infant Nutrition and Nutritional Disorders," William D. Mims, Memphis; "X-ray Diagnosis of Non-opaque Foreign Bodies in the Air Passages," Paul Mahoney, Little Rock; "Diagnostic Bronchoscopy," John S. Agar, Little Rock, and "The High Spots of Sinus Trouble in the Practice of Medicine," J. Harley Harris, Memphis. The scientific program was followed by dinner.

The Second Councilor District Medical Society met in dinner session at Batesville April 11th, the following program being presented: "Medicine as a Vocation," B. F. Turner, Memphis; "Acute Infectious Diseases," John N. Compton, Little Rock, and "Diarrheas," J. E. Jones, Little Rock.

The Clay County Medical Society met with O. H. Clopton at Rector, March 23rd. The speaker was J. B. Futrell, Rector, whose subject was "Abortion: Cause and Management."

Pat Murphey, Little Rock, addressed the Sebastian County Medical Society April 12th on "Cerebral Trauma."

The Lawrence County Medical Society met at Walnut Ridge April 12th for the following program: "Pre-Natal Care," T. C. Guthrie, Smithville, and "The Treatment of Snake and Spider Bites," J. H. McCurry, Cash.

Chas. D. Tibbels, Secretary.

The Washington County Medical Society was addressed April 5th by Alan Gilbert on "Spontaneous Pneumopericardium."

Fount Richardson, Secretary.

The Crittenden County Medical Society was addressed March 31st by the following from the Arkansas State Board of Health, T. T. Ross, A. M. Washburn and W. Myers Smith.

PERSONALS AND NEWS ITEMS

Guy Hodges has been elected a director of the Rogers school district.

L. P. Good, Texarkana, has been elected a member of the Western Surgical Association.

"Abdominal Adhesions and the Use of Papain" by J. K. Donaldson, Little Rock, appeared in the January issue of Archives of Surgery.

The following have been elected school directors: R. L. Johnson, Shawnee; H. C. Sims, Blytheville; T. E. Rhine, Thornton, and L. M. Weast, Yellville.

H. L. Brown, Malvern, has been appointed a member of the state Board of Education.

J. M. Walls is building a hospital at Blytheville.

Following the meeting of the Medical Association of the Missouri Pacific Railroad, of which he was president, Chas. S. Holt, Fort Smith, spent a vacation in Florida.

MARIRED—On March 10th, H. K. Wright, Hot Springs National Park, and Miss Lucy Adalene Davis.

T. W. Hardison, Morrilton, addressed the student body of Hendrix College March 29th.

"A Study Regarding Abdominal Adhesions and of Cotton and Guaze Sponges" by J. K. Donaldson, Little Rock, appeared in the January, 1938 issue of The American Journal of Surgery.

MARRIED—On March 11th, Ross Fowler and Miss Jacqueline Mallioux at Harrison.

"Medical Fads and Fallacies" by S. W. Douglas, Eudora, appeared in the March issue of the New Orleans Medical and Surgical Journal.

Speakers before the Arkansas Tuberculosis Association at Little Rock April 12th were: A. M. Washburn, Little Rock, "The State Expands its Tuberculosis Program"; "Two Weeks of Case Finding," C. Ray Williams, State Sanatorium; "What We May Expect from Collapse Therapy," J. D. Riley, State Sanatorium, and "Cooperating with the Private Physician in Finding Early Tuberculosis," S. J. Wolfermann, Fort Smith.

Dewell Gann., Jr., has been elected surgeon of the Robert C. Newton Camp, Sons of Confederate Veterans, Little Rock.

"The Significance of Calcifications within the Lungs," by D. A. Rhinehart, Little Rock, and "Anatomical and Functional Results in Fractures of the Pelvis" by F. Walter Carruthers, Little Rock, appeared in the March issue of the Southern Medical Journal.

J. T. Altman has been elected president of the Jonesboro Rotary Club.

E. M. Gray has been elected a director of the Mountain Home Chamber of Commerce.

J. W. Morris and R. L. Fraser have been elected president and director, respectively, of the McCrory Rotary Club.

A. D. Cathey has been elected director of the El Dorado Civic Service Council.

R. T. Henry has been elected a director of the Springdale Rotary Club.

J. B. Hesterly has been elected president of the Prescott Rotary Club.

R. E. Schirmer and C. M. Harwell addressed the Mississippi Council, P.-T. A., on April 9th.

H. T. Smith recently addressed the McGehee Rotary Club on "Club Service."

H. Fay H. Jones addressed the Pine Bluff Y. M. C. A. recently on "The Control of Social Diseases."

L. M. Weast has been elected a director of the Chamber of Commerce at Yellville.

Guy Hodges has been elected alderman at Rogers.

O. W. Hope has been elected mayor of Sheridan.

W. G. Eberle has been elected chairman of the Fort Smith District Board of Health.

Max McAlister, formerly of Texarkana, has been appointed director of the Benton County Health Unit.

Born—On April 10th, a daughter, to Dr. and Mrs. W. F. Adams, Fort Smith.

Euclid Smith, Hot Springs National Park, was recently elected a Fellow of the American College of Physicians.

W. B. Grayson, Little Rock, has been elected a Fellow of the American College of Physicians.

Euclid Smith, Hot Springs National Park, addressed the Potter County Medical Society, Amarillo, April 11th, on "The Etiology and Pathology of Chronic Atrophic Arthritis," and the Panhandle Medical Society at Amarillo, April 13th, on "Management of the More Common Rheumatic Disorders."

S. F. Hoge, Little Rock, has been reelected secretary of the Arkansas Tuberculosis Association.

"Treatment and Course of Neurosyphilis" of which S. F. Hoge, Little Rock, is a co-author, appeared in the Medical Bulletin of the Veterans Administration for October 1937.

R. Q. Patterson, Little Rock, has been made a Fellow of the American Academy of Dermatology and Syphilology.

Dr. Ruth Ellis Lesh is visiting her parents, Dr. and Mrs. E. F. Ellis at Fayetteville during May.

Paul G. Autry, Little Rock, addressed the school for medical reserve officers at the University of Arkansas April 18th on "Organization and Employment of Medical Service."

C. H. Lutterloh, Hot Springs National Park, attended the recent session of the American College of Physicians in New York City.

R. R. Kirkpatrick, Texarkana, has been elected President of the Tri-State Eye, Ear, Nose and Throat Society in April.

OBITUARY

CARL WILSON SLUSSER, aged 58, died at his home in Green Forest April 1st after a prolonged illness. Born at Wauseon, Ohio, March 18, 1880, he was a graduate of Northwestern University and of Rush Medical College in 1902. He first practiced at Adrian, Michigan, later moving to Sand Point and Grangeville, Idaho, from which place he entered the medical corps of the army on September 17, 1917, serving until muster from service on December 14, 1918. With his health impaired as a result of military service, he moved from place to place seeking recovery, finally retiring from active practice. He had been located in Green Forest since 1932. An active worker in organized medicine, he was president of the Carroll County Medical Society at the time of his death. He had been a member of the American Legion since discharge from military service. Surviving relatives are his wife, three sons and four brothers.

THOMAS C. WATSON, aged 60 years, of Benton, died in a Little Rock hospital April 7th. A graduate of the University of Arkansas in 1909, he practiced at Mount Vernon until 1927 when he became health officer of Faulkner county. In 1929 he was transferred to Saline county and had been recently engaged as health director of district ten. In addition to serving several terms as secretary of the Saline County Medical Society, he was secretary of the Seventh Councilor District Medical Society, holding both offices at the time of his death. For 12 years he was chairman of the Faulkner County Democratic Committee and was re-elected on April 5th as an alderman of the city of Benton. Surviving relatives are his wife, three daughters and a son.

THE EDITOR'S CORRESPONDENCE

April 8, 1938

My Dear William:

Yesterday evening some of the Little Rock physicians motored to Hazen to attend the Third District Councilor Meeting. In our party were Drs. D. A. Rhinehart, Caldwell, and Harvey Shipp.

On the program was a talk by Paul Mahoney on "Foreign Bodies in the Air Passages." Following this talk Dr. D. A. Rhinehart demonstrated with lantern slides the X-ray diagnosis of non-opague foreign bodies in the air passages.

Looking over the audience I gathered the impression that I was attending a meeting of the Memphis Ear, Nose and Throat Society. I had hardly got seated when one Memphis ear, nose, and throat specialist jumped to his feet and asked permission to show a few slides. He had a box about the size of a loaf of Colonial bread completely filled with slides that required about 15 minutes to be shown. Before he was seated another Memphis ear, nose, and throat specialist was on his feet. This followed in rapid succession until the last was heard. Dr. Rhinehart then gave his talk and several more Memphis physicians hurried to discuss it.

I was permitted to close the discussion and will promise you that I did not take an unfair advantage of any one of them in answering their questions or discussing the unprepared discussions made by most of them. I had no sooner got seated next to Dr. Martin Hawkins of Searcy, when he made the remark that "our side won."

Next on the program was an ear, nose and throat physician from Memphis, who read a paper on "Sinusitis." The Memphis men immediately fought to gain possession of the floor to discuss his paper. Then having no good reason another Memphis man began to re-open the discussion on my paper and I remarked to Dr. Hawkins that we might be beaten yet, but he returned with the remark that the game was over and that the doctor was only gathering up the bats.

All in all we had a very fine time. It was a pleasure to get to see the Memphis men again but we all felt sure that they would have accomplished a great deal more had they stayed on their side of the river and left Arkansas to the Arkansans.

With best personal regards, I wish to remain

Yours very truly,

PAUL MAHONEY, M. D.

AUXILIARY NEWS

Mrs. A. A. Blair was elected president of the Auxiliary to the Sebastian County Medical Society April 4th, when a luncheon and business meeting was held at the Blue Dragon dining room. Other officers elected are: Mrs. J. S. Southard, vice-president; Mrs. Thomas Price Foltz, secretary, and Mrs. W. F. Rose, treasurer. Retiring officers are Mrs. Southard, president, who automatically became vice-president; Mrs. Everett Moulton, secretary, and Mrs. C. S. Bungart, treasurer.

Delegates were named to attend the Arkansas Medical Society meeting in Texarkana April 18, 19, 20. They are: Mrs. M. E. Foster and Mrs. S. J. Wolfermann, delegates; Mrs. A. A. Blair and Mrs. Raymond T. Smith, alternates. Mrs. J. S. Southard, by virtue of her office as president of the local auxiliary, is also a delegate. Mrs. Southard presided at the business session at which reports of various committees were given.

Luncheon was served at 12:30 o'clock. Mrs. M. E. Foster, Mrs. C. S. Bungart, and Mrs. S. P. Stubbs were the hostesses. The 19 guests present included out-of-town auxiliary members, who were Mesdames G. G. Woods, Huntington, C. W. Hall, Greenwood, B. B. Bruce, Alma, and B. L. Ware, Greenwood. Fort Smith guests were Mesdames J. S. Southard, Everett Moulton, Arthur F. Hoge, B. Wayne Freer, Charles T. Chamberlain, A. A. Blair, J. E. Stevenson, W. F. Rose, Raymond T. Smith, Thomas Price Foltz, Walter G. Eberle, D. W. Goldstein, and the hostesses, M. E. Foster, C. S. Bungart and S. P. Stubbs.

MRS. W. F. ROSE,
Publicity chairman for the Woman's Auxiliary of the Sebastian County Medical Society.

Mrs. R. C. Kennerly, Mrs. S. D. McGill and Mrs. A. Davison entertained members of the Ouachita Medical Auxiliary at the Ouachita Hotel the evening of March 4th. Colorful spring flowers were arranged on the tables and covers were laid for twelve. Mrs. J. B. Jameson was elected delegate and Mrs. Kennerly, alternate, to the state convention to be held in Texarkana in April. During the informal hour which followed the dinner the members made supplies for the Camden Hospital.

The Woman's Auxiliary to the Washington County Medical Society met February 1st at the Washington Hotel for dinner with five members present.

On March 7th a joint luncheon was held with the Sebastian County Auxiliary, at the Washington Hotel in Fayetteville. Mrs. Jones, state president, attended the meeting.

Woman's Auxiliary to the Miller and Bowie Counties Medical Societies met March 24th at the home of Mrs. N. B. Daniel. Mrs. J. R. Dale and Mrs. Harry E. Murry were co-hostesses.

Mrs. Daniel, president, conducted the business session, which in the main, was making plans for the Arkansas Medical Society and Auxiliary meeting which will take place in Texarkana April 18-20.

Mrs. S. A. Collom, Hygeia chairman, called attention to the honorable mention recently in the magazine, Hygeia, of the Texarkana Auxiliary which is one of 32 counties in the United States to have 100 percent in membership subscription.

The program consisted of essays, sponsored by the Auxiliary, on "What Hygeia in the School Means to Me," read by the winners, Rosmary Whelan, of Providence Academy; Glen Burch, of Arkansas Junior High School; and Georgia Paulis, of Texas Junior High School. Mrs. Daniels presented each winner with a cash award.

Refreshments in the Easter motif were served in the dining room.

RESOLUTION

WHEREAS, The Great Teacher has seen fit to remove from our presence and association, Mary Dunlap Swindler, wife of Dr. E. B. Swindler, and

WHEREAS, Mary Swindler was a capable, untiring and resourceful worker in our organization, and

WHEREAS, Mary Swindler was a loving wife and mother, doing everything she possibly could for the happiness of her family.

NOW THEREFORE BE IT RESOLVED by the members of the Auxiliary of the Arkansas County Medical Society that we deeply regret the loss of our very dear friend and co-worker and do hereby extend to her family our deepest sympathy and condolence, and

BE IT FURTHER RESOLVED that a copy of this resolution be incorporated into the minutes of our organization; that a copy be sent to the Journal of the Arkansas Medical Society; and a copy to her immediate family.

By the Committee:
Mrs. S. A. Drennen, Chairman.
Mrs. M. C. John
Mrs. Homer Dickens.

THE SCHOOL-CHILD'S BREAKFAST

Many a child is scolded for dullness when he should be treated for undernourishment. In hundreds of homes a "continental" breakfast of a roll and coffee is the rule. If, day after day, a child breaks the night's fast of twelve hours on this scant fare, small wonder that he is listless, nervous, or stupid at school. A happy solution to the problem is Pablum, Mead's Cereal cooked and dried. Six times richer than fluid milk in calcium, ten times higher than spinach in iron, and abundant in vitamins B and G, Pablum furnishes protective factors especially needed by the school-child. The ease with which Pablum can be prepared enlists the mother's co-operation in serving a nutritious breakfast. This palatable cereal requires no further cooking and can be prepared simply by adding milk or water of any desired temperature. Its nutritional value is attested in studies by Crimm et al, who found that tuberculous children receiving supplements of Pablum showed greater weight-gain, greater increase in hemoglobin, and higher serum-calcium values than a control group fed farina.

Mead Johnson & Company, Evansville, Indiana, will supply reprints on request of physicians.

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JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

VOLUME XXXIV

JUNE, 1937—MAY, 1938

Abbreviations: Original Article (O); Editorial (E); Obituary (Ob); Resolution (R); Special Article (Sp); Book Review (BR).

RANDOM THOUGHTS OF THE SECRETARY

March 22nd. This day we hear of the northwest Arkansas genius who diagnoses ailments from the patient's handwriting. We are going to give him a headache by sending some of Blair's.

March 24th. That enthusiastic maternal welfare committee meets again with an 80% attendance. We have enjoyed our sessions with this hard-working group.

March 26th. Comes the tale of Bill Arnold, arrested for speeding and his alibi of being "on an emergency call to Wildcat Sanatorium."

March 27th. The Alan Gilberts visit and scientific discourse is interspersed with Captain's tricks, the latter most pleasing to the youngster.

March 28th. We never were much for forehandness but we do believe we will look up the national anthem of Czecho-Slovakia. We got caught too many times during the last war failing to recognize these.

April 1st. Just what manner of times come upon us: Lo, the poor Indian is now pow-wowing about beer, even holding an election.

April 4th. Again serving as acting chairman of the staff meeting, seeking to maintain decorum and stifle the undercurrent of conservation as the hospital report is read, we ask Raymond Smith to repeat the figures read, which he does to our confusion as a disciplinarian.

April 5th. Woods, Hunting's intrepid aviator, chides us for our wanderings about the country, an unjust criticism, as this column has made no mention of our absence from the home town since March 12th, and that but for the afternoon. This, too, with invitations to Hazen, Batesville and Hot Springs for the month.

April 12th. This evening with the Garland County society in annual banquet session assembled, a festive occasion, falling as always upon the natal day of Squire Wootton, his presence at the table in high fettle and good spirits more than ever this year an occasion for rejoicing. Our sally forth into academic discussion having been received, there must needs be brought up that subject with which our every public appearance is now greeted, and to which we wish with all fervor that we knew the answer. With the Wolfermanns, Peggy and I play auto tag en route home, finding the cook stove cold at Waldron and no coffe at one A. M., eating a peanut bar, and away, Sid's habit of getting a puncture on this route almost broken but for a nail a scant six miles from the lights of the home town. To him we give all manner of bouquets for accepting this motoring misfortune at 2:00 A. M. with a smile. Acquiring one additional bit of Americana along the way—a tourist camp bearing the title: "Purity Tourist Camp," further deponeth sayeth not.

BOOK REVIEWS

Men Past Forty. By A. F. Niemoeller, A. B., M. A., B. S. Pp. 154. Price $2.00. New York: Harvest House, 1938.

This book should be well received by both the medical profession and the lay readers. Here is well discussed in a serious vein a question that has been sadly neglected. The reader is intelligently advised of the sex evolution of man and no reader of this book should ever fall into the hands of the quack or be misled by the charlatan who promises rejuvenation. The individual who is in his declining years should be comforted and helped to accept age philosophically.

Operative Gynecology. By Harry Sturgeon Crossen, M. D., professor Emeritus of Clinical Gynecology, Washington University School of Medicine; Gynecologist to the Barnes Hospital, Saint Louis Maternity Hospital and Saint Luke's Hospital; Consulting Gynecologist to the De Paul Hospital and to the Jewish Hospital, and Robert James Crossen, M. D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine; Assistant Gynecologist and Obstetrician to the Barnes Hospital and the Saint Louis Maternity Hospital. Fifth edition, entirely revised and reset. Pp. 1076. 1264 illustrations with 3 color plates. Price $12.50. Saint Louis: C. V. Mosby Company, 1938.

This volume comprehensively covers the practical phases of surgery of the female. Carcinoma of the cervix is discussed in detail and radiation therapy is emphasized as superior to surgery. As to carcinoma of the fundus, it is felt that pre-operative radiation, x-ray and radium, with operation, is the proper procedure. It is refreshing to see this surgeon properly evaluate irradiation. The newer technics are included in sufficient detail. Many new illustrations have been added. This is a most excellent treatise on gynecological surgery.

Textbook of Clinical Pathology. By Roy R. Kracke, B. S., M. D., Professor of Pathology, Bacteriology and Laboratory Diagnosis; Chairman of the Department, Emory University; Pathologist to the University Hospital, Emory. With 12 contributors. Pp. 567. 205 illustrations. 31 color plates. Price $6.00. Baltimore: William Wood and Company Division, The Williams and Wilkins Company, 1938.

The collection of discussions on the application of the clinical laboratory to the general practice of medicine is definitely the most clear and concise text available. Dr. Kracke has associated with him leaders in respective fields, and while the work is not an exhaustive one for reference, it fully answers the demands of the busy practitioner and the laboratory man. It will no doubt find a hearty acceptance among those clinicians who most fully avail themselves of the advantages of the clinical laboratory.

Surgical Diseases of the Mouth and Jaw. By Earl Calvin Padgett, B. S., M. D., F. A. C. S., Associate Professor of Clinical Surgery, University of Kansas School of Medicine, Kansas City, Kansas; Associate Professor of Oral Surgery, Kansas City Western Dental College, Kansas City, Missouri. 807 pages with 334 illustrations. Philadelphia and London: W. B. Saunders Company, 1938. Cloth, $10.00 net.

The author completely discusses the field of oral surgery, advantageously including principles of dentistry from the surgeon's viewpoint. The treatment of malignant tumors by radiation is indeed well-handled, exact technical details being included for each type of case. This book is of exceptional interest to those interested in oral surgery.

WHAT DO YOU RECOMMEND?

In these days of unrest and change, individual and groups of medical men, with increasing frequency, ask: "Why isn't something done about this?" The answers are not borne of the moment or in a single mind. Those in position of office and trust have warned, have sought answers, have pleaded for unity of action for the past ten and twenty years in a very sincere and earnest endeavor to bring about concerted action and unity of purpose to ward off many of the now undesirable practices and conditions. These pleas vaporized in the wide heavens. Medical men evidenced no concern or interest as a whole until the past few months or years. Now, finding themselves in the very midst of conditions that seriously threaten their former relationships and comings and goings, the questions are numerous—"How did this come about?" "Why isn't something being done about it?" The first question can be answered readily and the indictment placed upon the doorstep of medical men. The second question does not lend itself to a solving answer because of a mass division of opinion and an unwillingness to subscribe support and give cooperative observance to movements designed to eliminate intolerable conditions and practices.

For future guidance, and in further endeavors to find answers and solutions, we are inviting you, fellow member, to send in your recommendations upon:

1. How can there be brought about a wider observance of the principles of ethics? (There is a fundamental need that such observance be universal if majority action is to be obtained.)

2. How can personal quests and ambitions be made to be subservient to the better interests and practices of the entire membership?

3. How can public good will be established for scientific medicine and its parctitioners?

4. How can standards of practice and service be raised and reflected in every practitioner?

5. How can practitioners be caused to recognize the importance of preventive medicine, practice it and bring about the return of this branch of medicine from the public clinic to the physician's office?

6. How can industrial medicine and surgery be taken away from the control and dictation of insurance companies and corporations, and how to eliminate contract practice in this field of medicine?

7. How can we cause practitioners to realize their limitations and cause them to desist assuming care and treatment of cases which they are incompetent to treat?

8. How can guild loyalty and support be developed and applied?

These are questions that are of grave concern and interest to your officers, council, and standing committees. They seek and welcome your answers. May you be heard from.—Calif. and West. Medicine.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XI May, 1938 No. 5

Tubercle, the British journal of tuberculosis has been published continuously for about two decades. Its first editor was Dr. J. Rosslyn Earp, who has for the past several years distinguished himself in the field of Tuberculosis and public health in the United States. With the December, 1937 issue, Tubercle has put on a new and beautiful typographical dress and added the subtitle "A Journal of Diseases of the Chest." Tubercle has many appreciative readers in this country, for the practical problems of tuberculosis control in the two countries are almost identical. Tuberculosis Abstracts congratulates Tubercle from which it has, in the past, drawn aid, and presents in this issue brief abstracts of a symposium on the difficulties encountered in dealing with the tuberculosis problem.

DIFFICULTIES ENCOUNTERED IN INDUSTRY

Enlightened industry nowadays realizes that it must carry a certain number of sub-normal individuals. In the long run this is sound economic policy, for industry cannot afford to lose trained employees nor to breed psychological unrest of workers caused by the knowledge that loss of employment will follow serious or prolonged illness. Yet the employment of workers who have tuberculosis, or have recovered from the disease, is an exceedingly awkward problem for tuberculosis is insidious and infectious and leaves its sufferers incapable of normal physical effort for long periods.

Economic difficulties experienced by the tuberculous wage earner are serious. They are partially relieved by continuing part wages. Treatment in the sanatorium is rendered easier and more effective if the worker is relieved of immediate worry and is given hope for the future. It reduces the temptation to return to work too soon.

Environmental difficulties are particularly acute in working-class areas. The problems of slums, overcrowding and undernourishment are being solved by the slow social evolution now going on.

Difficulties arising out of the patient's own attitude include, (a) fear of losing his income, (b) his job, and (c) fear of the sanatorium. These fears can be greatly allayed if the policy of the firm is to take back employees when they have recovered. The dread of the sanatorium can usually be overcome by education and wise propaganda.

The difficulty of returning to a different kind of work than that to which they have been accustomed must be faced by some workers. A man must know that his job is a real one and not one created merely to find him employment.

The employer's difficulties must be faced squarely. The returning tuberculous patient has usually a greatly reduced efficiency. He is inferior to the normal worker and this inferiority is likely to persist for a few years. If he attempts to keep pace with fellow workmen he invites an early breakdown. Industry quite naturally, is not likely to welcome the worker who needs a sheltered life if he is a new entrant but most employers will take back old employees if the prospect of eventual return to reasonably good health exists. Of course, industry has to deal with many employees disabled by conditions other than tuberculosis. With these "crocks" the returning tuberculous worker has to compete for the suitable jobs. Many are the employer's problems in adapting the needs of industry to the employee who cannot be subjected to strains such as overtime work, shift and night work, and competition with more vigorous workers.

It is, of course, not possible to pay higher wages to the tuberculous patient than to other workers. In fact he must often be satisfied with a lesser wage. This means that at the very time he needs a higher and better standard of living, he actually has to be content with a much lower one. This situation calls for generous cooperation between the employer and the Care Committee (well organized in England). The tuberculous patient returning to industry should be subsidized until he is able to earn a reasonable wage. Industry cannot be expected to make the subsidy directly.

The danger of infecting other employees must also receive attention. A patient with a positive sputum should not be allowed to return to surroundings where he may infect others. Certainly he should not be permitted to engage in industry involving the handling or packing of food or which requires him to come into contact with the public.

The author urges close liaison between the tuberculosis service and industry. Small firms find it particularly difficult to deal with recovered tuberculous patients but can do much if the facts about tuberculosis are carefully explained to them by the medical officer or doctor. The doctor must not only be conversant with the disease but must also possess an intimate knowledge of the industry and requirements of the workers if he is to talk reasonably and convincingly with the management.

Difficulties Encountered in Industry in Dealing with the Tuberculosis Problem, Ronald E. Lane, M. B., M. R. C. P., Tubercle, Vol. XIX, No. 3, December, 1937.

DIFFICULTIES OF THE GENERAL PRACTITIONER

To persuade people, especially young people, to submit to observation and treatment during what might be called the "antenatal" stage of the disease in which no certain diagnosis can be made in the face of the doctor's suspicion, is a problem of the general practitioner. The chief reasons for the reluctance of patients to seek medical aid include:

1. The temporary improvement in their general health following treatment which lulls both the patient and the doctor into a false sense of security.
2. Prejudice against being regarded as a subject for notification. Patients fear the social stigma, segregation and threatened invasion of their homes by the authorities.
3. Alarm caused by the prospect of losing income. This is probably the greatest obstacle to continued observation. The vast majority of working class people simply cannot afford to be ill and hesitate to seek an opinion which will run counter to their own inclinations.

Other difficulties include the isolation of the patient at home, the supervision of contacts, and the question of fitness for work. The doctor's greatest difficulty is the social environment and low standards of living of his patients.

My Chief Difficulties in Dealing with the Tuberculosis Problem, W. F. Jackson, M. B., Ch. B., J. P., Tubercle, Vol. XIX, No. 3, December, 1937.